

Carb Heat January 2013

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Next Meeting: Thursday January 17 at 7:30 PM
Bush Theatre
Canadian Aviation and Space Museum

Presentation:

1909 Bleriot project

by Matt Carson



Experimental Aircraft Association Chapter 245 Ottawa. We are a group of Amateur Aircraft Builders, Owners, and Enthusiasts with a hangar, lounge and workshop facility located@the Carp Airport, just west of Ottawa.

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President's Message by Cary Beazley



Happy New Year Everyone!

It looks like the jolly old elf Santa still has his mojo as the world was still around for Christmas and New Years.

SAM ultralight - light Sport aircraft – SAM Aircraft

www.sam-aircraft.com

Thierry Zibi of SAM Aircraft was nice enough to come all the way from the Montreal-Lachute area to talk to us about their nice new shiny retro trainer look machine.

There were a lot of diagrams, photos and discussion of their progress including a video of a full wing structural load test that passed with reserve to spare. It has several novel features including 4130 safety cage and three different wing configurations. It will be available in both kit and ready to fly versions. There were quite a few questions from the floor.

SAM aircraft is planning to complete the flight test program in the spring and begin ramping up production later this year. We wish them luck on the flight-testing and look forward to seeing them at the fly-ins or in the air!

Thierry also invited us to their December 15th open house factory tour and number of members and locals made the trip:

http://www.youtube.com/watch? v=uq_Dt1e01r4

Thanks Thierry!

Air Cadet Fly day Dec 15th

EAA Chapter 245 was happy to host the Kanata 872 Air Cadet Squadron once again.

The weather cooperated, the conditions were sunny, clear, not too windy and a bit refreshing – a great day for flying.

Everyone was happy to have the EAA lounge as a place to warm up and it sounded like everyone was going to get a flight.

Ken Potter and John Montgomery volunteered to host. Last I saw John, he was teaching another group of cadets the finer points of riveting and metal construction of some parts – sounded like another good day in the shop.

Gone West

We received sad news that John Richards passed away in the early morning hours on Dec 28th via Stan Acres.

John has been in the aviation community for some time. Mark Briggs noted that John had previously demonstrated his craftsmanship restoring a 32' wooden cabin cruiser and Jaguar Etype. He built and finished a very pretty Zenith CH-300 after many years in the early 1990s, sold it, and started building his Whittman Tailwind soon afterwards.

Unfortunately, the beautiful, scratch build Tailwind was damaged landing in a farmer's field on its maiden flight due a fuel system problem.

Like a true homebuilder he picked himself up, completed the repairs and successfully flew the Tailwind. It should be noted that John was working on the Tailwind project in his mid-eighties. His spirit, determination and stories will be missed by all that knew him. Goodbye John.

Around the Patch

We had some decent snow dumps and Mark Briggs has made a Herculean effort to clear the snow from the row hangars and chapter ramps – Thanks Mark.

Martin Poettcker has also been working overtime trying to keep Mark's Snow blower up and running. It sounds like Bill Reed and Curtis Hillier have spent more time fixing the Chapter push snow blower as well.

Bill Reed attended the latest round of the Canadian Aviation Regulation Advisory Council (CARAC) meetings.

Michel Asselin was also nice enough to host an open house tour of his RV7A project – looking good.

André Beauchamp and Hugh Thayer have been bouncing back and forth between working on and flying the Zenith and Rebel.

Bo Turpin and Curtis Hillier have been Canadian winter kitting Bo's HKS [engine for the Chinook Plus 2].

EAA 245 Club Stuff

Sunday morning get together continue @10am at the Carp EAA hangar. See you there.

Many Chapter members get together for dinner prior to each EAA 245 meeting at Swiss Chalet (corner of St Laurent Blvd and Montreal Road) @ 5:30PM. Everyone is welcome.

See you at the meeting!



Meeting Schedule

Jan 17 2013	1909 Bleriot project – Matt Carson
21 Feb 2013	To Be Determined
21 Mar 2013	To Be Determined
18 Apr 2013	To Be Determined

Editor's Comments

This month as usual, Cary Beazley presents the President's Message and Wayne Griese brings us a historical look at Carb Heat.

Curtis Hillier presents us with an article that points out some interesting issues with propellers and the Airworthiness Information Report.

Alfio Ferrara is back with his Gadget Corner. He gives us an

update on his first article (September) concerning the dental camera. He also covers some new, LED lights from a local source.

With the new year, there are more listings for flyout possibilities. And check the For Sale section where there are new opportunities listed.

I have found some lighthearted Rules of Flight an reproduced them for your enjoyment; (source unknown).

We need more stories and information to pass on to our readers. If you go to fly-ins, take notes, pictures and write a short article so ohers find out what they missed.



Propellers by Curtis Hillier

Return To Flight

When I put my Davis back in the air in the early 2000 time frame, I had to make a choice; use a traditional propeller made from aluminum or wood, or use one of the more modern carbon fibre designs. I did some investigation on reliability and wear, and decided on the Warp Drive Prop. I chose to use the straight (not tapered) blades on my C-85-12 engine (2 blades are good for up to 100 HP) and went with a traditional two-blade configuration.

When I originally ordered the blades I stayed with the same effective diameter as the original aluminum blade had (65 inches) and did not spend the extra money on the nickel leading edges.

Inspection

This year during my annual I decided I should send the blades back to the factory for a complete inspection, and to have them professionally "re-fix" my fixes over the ten years of leading edge wear.

I was happy to hear from the factory that the blades were in excellent condition and other than the leading edge erosion from the most recent unfortunate impact with weather (mostly rain and snow last winter), the blades were in perfect flying condition.

Nickel Leading Edge

Since the blades were at the factory I took advantage of their (\$60 per blade) offer to install the nickel leading edges on my blades. They also



recommend placing their 3M brand plastic tape on the root edge to help eliminate erosion to the blade there as well.

Each of my (65 inch diameter) blades is 30 and 11/16 inches long. The nickel edge is 13.125 inches long extending down from the tip. I applied the plastic tape I got from Warp at Oshkosh from the lower point of the new nickel strip

towards the root. The plastic tape is 12 inches long. This means the blades now have over 25 inches of protection along the 30 inches of blade.

The propeller is an important part of the flight characteristics, and of course since the Warp Drive design is pitch variable (ground adjustment) I wanted the pitch back to exactly where I had it before the tear down and edge rework. I

levelled the prop hub and re-set the angle to my previous setting.

What To Do?

So the prop is basically back to where it was before my annual, however during the rework at Warp, Drive, they established a new seal number for the blades. On my Annual Airworthiness Information Report (AAIR) the propeller (Warp Drive) and the serial number is recorded in the





file for my aircraft. I asked around to see what sort documentation might be required to establish a new serial number for the "new propeller". Of course I made a record of the change to the nickel leading edge, factory inspection and new serial number in the logbook but was wondering if I could simply fly with the new propeller (for the rest of the year) and simply update it with my next AAIR report. Most opinions (from folks I chatted with) were similar

but no one seemed to know for sure what I should do.

The Solution

I did the logbook and annual inspection entries and was told by the Superintendent, Civil Aviation Operations, that all I had to do was provide them with the new serial number and they would update my record - this could not be simpler!

Photo 1 shows a blade edge with both the new nickel and plastic cover in place and installed.

Photo 2 shows how close to the root the plastic covers (in case the other photo is not clear enough). I was very careful to start the plastic cover exactly at the same point on each blade (where the nickel stops). Photo 3 is a shot from the other end of the prop.

I am very happy with the new blades (each measured 975 grams) and look forward to seeing how they perform the next time I find some weather to fly through. For reference, the non-nickel blade weight was 945 grams, so it would seem the rework added 30 grams to each blade.

Post Note

I have flown the aircraft for several hours now and in formation with C-GJOY (three blade tapered prop). The aircraft are very closely matched. I have not performed a vibration balance check yet but hope to in the near future.

Curtis Hillier

All photographs by Curtis Hillier

Rules of Flight

- 1. Every takeoff is optional. Every landing is mandatory.
- 3. Flying isn't dangerous. Crashing is what's dangerous.
- 4. It's always better to be down here wishing you were up there than up there wishing you were down here.
- 5. The ONLY time you have too much fuel is when you're on fire.
- 6. The propeller is just a big fan in front of the plane used to keep the pilot cool. When it stops, you can actually watch the pilot start sweating.
- 7. Always try to keep the number of landings you make equal to the number of take offs you've made.

(Continued on page 8)

EXHAUST – from the Carb Heat Archives



20 YEARS AGO, January 1993

Leading EAA Chapter 245 for 1993

President:

Gary Palmer; Vice-President: Rod Emmerson; Luc Martin; Secretary: Treasurer: George Elliott; Editor: Andy Douma: Aircraft Operations: Dick Moore; Membership: Manfred Ficker; Tool Crib: Tim Robinson; Classifieds: Any Douma; Publishing: Dick Moore.

On December 9th, 1992 Andy Douma represented the Chapter at the official opening of the apron and other works on the occassion of the 50th anniversary of the Carp Airport. The ribbon cutting ceremony was attended by KanalHanna, president of First Air; Paul Dick, MP for Lanark-Carleton; West Carleton Mayor Roland Armitage and Tony Taylor, president of Westair Aviation.

wayner@igs.net.

Wayne Griese

30 YEARS AGO, January 1983 Membership List

Bill ARGUE	Roger FOWLER	Roger NANTEL
Henri BEAUDOIN	Keith GILLESPIE	Bob OWENS
Alain BEAULIEU	Jim GOLDSTONE	Bill PEPPLER
John BELL-WALKER	Harvey HALVERSON	Ray PERKINS_
Jim BRADLEY	Bruce HAMER	Terry PETERS
Jim BUTLER	Claude HARIDGE	Olav PETERSON
Denis CALNAN	Murray INGLIS	Peter PLAUNT
John CATCHING	Don KERNOHAN	Powerair Dev.Corp.
Ken CAVERS	Des KORNIK	George REID
Edwin CHAMBERS	Dale LAMPORT	Laurent RUEL
Jack COUTTS	Bill LAUNDRY	Louis SAUMWEBER
Len CURLING	Reg LeBLANC	Imre SCHEFFER
Doug DALE	Rev. J MacGILLIVRAY	Barney deSCHNEIDER
Deric DODS	Jack MACREADY	Gord STANDING
Jack DODS	Charles MARTEL	Clare STRUTT
A G DOUMA	Barry MASON	Eric TAADA
Bill DRENNAN	Gerry McGRATH	Parr TATE
Garry FANCY	Michael McGRATH	Tom VAN-TUYL
Bev FIELD	Delmer McLEAN	Paul WASHER
Stephen FOGARASI	Ralph McWHINNIE	Allan WOOD
Len FORSYTH	Dick MOORE	
Ralph FORSYTH	Zoltan MOROCZ	

Gadget Corner by Alfio Ferrara

Dental Camera

In the September issue of Gadget Corner, I described a gadget that allowed for taking close-up photos of engine internals. This is a home dental inspection device with a 2 mega-pixel camera. Some modifications were required so the device could slip through one of the sparkplug ports. I am sad to say, the results on the unit I purchased were less than stellar. It would seem that the one I have has a very short focal point. If pointed a little

too far (as in trying to show half of the exhaust valve), the image is severely out of focus, so much so that it was not even worth showing it here.

To say I am disappointed is quite the understatement.

I only plunked down \$50, so I guess I can now put it back to its original intended use as a dental

DCC R357 R460 GND

inspection instrument. Be on the lookout for a whiter and brighter smile ©.



Here is some background information on other people's experience with a similar device; http://www.vansairforce.com/community/showthread.php? = 88598&highlight=dental+camera

LED Strobe Lights – NavStrobe Lighting

Chris Winter lives in Carleton Place and enjoys flying a Cessna 140. He also has a new hobby, selling self contained LED strobe lights for ultralights. These of course are non-certified units so they cannot be legally used in certificated aircraft. Nevertheless I was curious to see if I could fit one in the position light socket of our Vans RV9A and compare some light intensity measurements.



I borrowed a few samples from Chris and found that the following model would just fit under the lens of the position light dome, and a perfect fit for the socket (BAY15sWcs-7.5w-A-1512). This model was the brightest of the bunch, rated at about 7.5W.

incandescent bulb containing a reflector.

An interesting aspect of these LED bulbs is that they will operate over a wide voltage range (8V to 30V DC), and if

subsequently turned off and on quickly within 3 seconds of first turn-on, they will revert to a strobe mode. Pretty cool.





I took a few comparative measurements at different positions (front and at 90 degrees) which revealed a little more than half the lumen intensity for the LED bulb compared to the original incandescent bulb used in our setup. Not bad. This picture shows the two bulbs side by side with the

You will find more information on these lights and how to purchase them at the following link: http://www.navstrobelighting.com/

More Gadgets

If you have some information on new gadgets that you would like for me to include in this column, helpful maintenance or construction tips, or just comments (the good and the bad.... please be kind), then feel free to contact me. at: <longeron@gmail.com>

Until next time ...

Alfío

All photographs by Alfio Ferrara

Rules of Flight (continued from page 5)

- 8. A 'good' landing is one from which you can walk away. A 'great' landing is one after which they can use the plane again.
- 9. Learn from the mistakes of others. You won't live long enough to make all of them yourself.
- 10. The probability of survival is inversely proportional to the angle of arrival. Large angle of arrival, small probability of survival and vice versa.
- 11. Never let an aircraft take you somewhere your brain didn't get to five minutes earlier.
- 12. Stay out of clouds. The silver lining everyone keeps talking about might be another airplane going in the opposite direction. Reliable sources also report that mountains have been known to hide out in clouds.
- 13. You start with a bag full of luck and an empty bag of experience. The trick is to fill the bag of experience before you empty the bag of luck.

Fly-Out Possibilities

All Items Taken from the COPA Website

February 1-3, Montebello, QC:

The Canadian Challenger Owners Association invites Challenger owners and fans as well as all aviation enthusiasts to congregate at the Chateau Montebello for the 23rd Annual Challenger Winter Rendezvous. For more information, please contact Bryan Quickmire at bdq@challenger.ca

February 16, Hawkesbury East, ON (CPG5):

COPA Flight 131, the Hawkesbury Flying Club invites you to a Ski Fly In to celebrate Aviation Day in Canada. Sloppy Joes served at noon by the club president. Drive ins welcomed. 3435 County Road 17, Hawkesbury. For more information please contact Stephen Farnworth at

HawkesburyFlyingClub@gmail.com or 613-632-3185.

February 17, Lake Memphremagog, QC:

Fifth International Ski-Fly Meet. Canadian and US pilots to meet each other at our common border line on the ice between 11:00 a.m. and 1:00 p.m. Bring some lunch and a lawn chair or something to sit on to be comfortable while we talk across the border with each other. There will be a temporary line made in the snow to indicate the temporary exact border. Canadians are to land on the Canadian side and Americans are to land on the U.S. do not let any part of your plane enter the other country at any

time in the air or on the ground. As specifically indicated by a line in the snow or on the ice of the lake on the West side of the island. For more information please see attached event.

February 23, Ottawa River,

ON: COPA Flight 169, Mo's 24th Fly-In starting at 10:00 a.m. Located on the QC side 1 Mile West of Ottawa VOR. Co-ordinates N 45 26 57 W 75 55 48. Ground frequency 122.75 and air 123.20. Ski landing recommended. A strip for airplanes on wheels will be arranged weather permitting. Landing is at your own risk. See poster. For more information, please contact Maurice Prud'Homme at 819-682-5273. RAIN OR SHINE.

February 24, Cobden, ON:

COPA Fight 124, Champlain Flying Club hosts their annual "SKI Plane Only" winter fly-in from 10:00 until 14:00. CPF4 in the Supp. Beans, chilli and beverages. For more information, please contact Larry Buchanan at lbuchan@nrtco.net or 613 638-2792.

March 2, Kars, ON (CPL3):

Ottawa Valley RAA Chapter 4928 (Kars) 11th Annual Ski Fly-In. Comm 123.4, RWY 26 / 08, 45°06'N 075°38'W. One week after Moe's world famous ski Fly-In. Homestyle food served from 11 a.m. until 2 p.m. in our Clubhouse. Public Welcome. Dilworth Road just East of 416. For more information, please email Dave Stroud dstroud@xplornet.com. To check on field conditions 24 hours prior to the event call Dave Stroud at 613-489-2347.

For Sale or Rent

Place your ads by phone with Yvon Mayo 613-830-1935 or e-mail to yvonmayo@rogers.com or eaa245@gmail.com The deadline is two weeks before the next meeting. The ads will run for three months. You may request a two-month extension. Please let me know if any of the articles have been sold.

WANTED

A **5x5 tire** in usable condition. Contact: John Firth johnfirth0@gmail.com

FOR SALE

The Canuck Group at EAA 245 in Carp has **shares** in the 1946 Fleet Canuck CF-DPZ for sale. The aircraft has 1250 hrs TTSN engine and airframe since being built in 1946 and has always been hangered. Price, \$6,800 per 1/5th share. Own a Canadian classic. Please call Ken Potter at 613 259-3242 or email at:

kjpotter@sympatico.ca

FOR SALE

2003 **Amphib floats** 1850 on Murphy Rebel. Manufacture Bilmar. Construction: Kelvar, fiberglass composite, electric hydraulic, hatches, rigging, dual water rudders. Must sell. 20,000.00\$ Contact Paul Sicard SicardPL@xplornet.com

FOR SALE

Rotax 582 complete with 3:1 C-Box, carbs, and exhaust. 5 hours TT since new which included Rotax break in and taxi test. \$ 3,000 OBO Call Ken Potter at 613 259-3242 or email at: kjpotter@sympatico.ca

FOR RENT

Chapter 245 members can **rent a tiedown** near the EAA 245 hangar at Carp Airport. You can rent the tiedowns by the month or for the full year. Call Curtis Hillier 613 831-6352

FOR SALE

1986 Rutan LONG EZ FOR SALE: \$36,000
470 Hrs airframe. Engine: Lycoming 0-235 L2C
2430 hrs TT.(with original logs). 5.0 hrs since Top
overhaul & other new parts: Impulse Mag ,Vacuum
pump, Starter & alternator. Avionics: Xpndr Collins
TDR-950, Garmin 296 GPS, Kannad 406-AF ELT,
ICOM A5 Radio, Flightcom 403mc Intercom.
Hangered at CYRP. Extra prop (Silver Bullet).
Andrew 613-836-3968, cell 613-295 7451
andrewr@magma.ca Currently in flying condition.
Last annual Nov 2011. For specs see http://en.wikipedia.org/wiki/Rutan Long-EZ

2013 EAA245 Chapter Membership Renewals

I will be available to renew your membership for the year 2013 at the next chapter meeting on January 17 at the Aviation Museum. Please see Alfio before or after the meeting.

Of course, we always welcome guests to sample our discussions, so be sure to invite a friend or two to our next meeting; who knows, maybe they will catch the bug too.

Alfio Ferrara

Membership Coordinator

EAA
ОПАWA 245

Experimental Aircraft Association Chapter 245

Membership Application New. Renewal:

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		Date: _			
Name:					
Address:					
City/Town:					
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Phone:()_	-	H(_)		W
Email:					
Newsletter Dis	stribution F	Preferen	ce:		
Email or	Canada P	ost			
Aircraft & Reg	istration:_				
Aviation Affilia	tions:				
EAA Number_		_ EXP [Date:_	/_	_/
COPA:	RAA:	\	JPAC:		_
OTHER:					

P.O. Box 24149 300 Eagleson Road Kanata, Ontario, Canada, K2M 2C3

Make cheque payable to:

EAA Chapter 245 (Ottawa)

Annual Dues: January 1st to December 31st. (prorated after March 31st for new members / subscribers).

Newsletter Subscriber: \$35.00 Newsletter only

Associate Member: \$35.00* Newsletter plus Chapter facilities

Full Member: \$70.00*

Newsletter, hangar, workshop, tiedowns. (Note: there is a one time \$200 initiation fee when you become a Full Member

*Note Associate and full members must also be members of EAA's parent body in Oshkosh WI, USA