

Carb Heat November 2012

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Next Meeting: Thursday November 15 at 7:30 PM Bush Theatre Canadian Aviation and Space Museum

Presentation: *The Sam Ultralight* / *Light Sport Aircraft* by – Thierry Zibi of Sam Aircraft

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 Movember! How are those mustaches coming?

The cold weather approaches and a lot of the planes are sleeping in their hangars.

We have had a few flurries and some pretty cold nights already.

There was a flurry of pre-Sandy activity prior to her arrival, hopefully Sandy's wrath didn't get anyone locally, the North Easterners were not so lucky – hopefully things will be back to normal soon.

This Christmas season is shaping up to be a magical battle between Santa and the ancient Mayan calendar gods threatening to end the world.

My bet is on the jolly old elf, Santa – I hope to see everyone in November AND January.

Merry Christmas everyone!

Flammability (of the stuff we put in our cockpits) – Curtis Hillier I want to thank Curtis for giving us the eye opening and thought provoking presentation on the flammability of stuff in our cockpits (and other places for that matter...). Lots of useful information and things to think about in terms of materials –

It's annoying when your car engine pops, it really sucks over rocks, trees and water in a plane... cockpit fires rank way up there in things not to experience first hand.

There is nothing like the smell of burning wire insulation while flying over rocks, trees and water at night – not fun!

Any additional protection and time to get down safely sounds great.

Thanks again Curtis.

October Elections This year the President, Membership, Webmaster and the Technical Information officer positions were up for re-election after serving their two-year terms.

Nathan Aligizakis resigned from the Technical Information officer position. The Technical Information officer position remains vacated as there were no nominations or volunteers for the position.

John Montgomery resigned from the Membership officer position. Alfio Ferrera agreed to stand for the membership position and was elected by acclamation. Alfio is also wearing the Young Eagles hat.

Russ Holmes agreed to let his name stand for another term as the Webmaster officer and was reaffirmed to the post by acclamation. And I, Cary Beazley, was also reaffirmed for another term as President by acclamation.

Peter Zutrauen has recently resigned from the Secretary position, so it now sits vacant until the October 2013 elections.

On behalf of EAA Chapter 245, I would like to thank the outgoing executives for all the work they have done in their terms of EAA chapter 245 service. John Montgomery has been the Membership Coordinator for many terms.

Nathan and John have both indicated they are still available to provide assistance. Thanks guys

I would also like to thank Lars Eif for smoothly officiating the election again this year.

If anyone is interested in serving as the Secretary or Technical Information officer, please feel free to approach any of the executives.

Makerplane Check out the latest Makerplane news: www.makerplane.org

Around the Patch There have been a few end of season annuals – book the hangar soon before the snow drops.

People seem to be switching over to their winter projects.

Curtis Hillier has continued working on the tie down anchors.

Bo Turpin should have a huge Chinook grin by the time you read this. It was also good to see that our latest member Bo had submitted a newsletter article – thanks Bo!

There was a quick poll at the end of the October meeting to see what folks wanted for upcoming meetings. We'll try to arrange a few more tours this year to the NRC and other aviation sites.

If anyone has any ideas, suggestions or just want to become more involved - feel free to approach any of the executives. In the end, these clubs are what we make them.

EAA 245 Club Stuff

Sunday morning get together continue @10am at the Carp EAA hanger. Hope to see you there.

As usual, 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!

Cary

Sam Ultralight at Wings Over Gatineau (Sept 2012)



Meeting Schedule

5			
15 Nov 2012	The Sam Ultralight / Light Sport Aircraft – Thierry Zibi of Sam Aircraft		
	<u>www.sam-aircraft.com</u>		
December	There is no meeting in December		
Jan 17 2013	1909 Bleriot project – Matt Carson		
21 Feb 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.

Jeff Whaley is continuing his series on the build of "My Plane". This series started in January and this is the tenth installment the series. Jeff is ending the series for now. However he may give us an update later next year once his "Plane" is back in the air. Ken Potter tells us about the flying adventures of the Fleet Canuck with an organized formation flight.

We have another humorous sign picked up by Alfio Ferrara. However, he was not able to produce his usual technical buying advice in Gadget Corner this month.

Flying season is quickly shifting to Winter Flying, the Summer fly-ins

are over; there are some fly-ins during the Winter but not many.

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.

Yvon Mayo

My Plane - Forced Landing

(This is part of a series; see 9 previous articles in every Edition from January 2012)

Foreword

This is the final article for submission in year 2012. When I started writing these articles everything was going great and I expected my closing article to be about future trips and blue sky horizons. If my forced landing had preceded these articles they probably wouldn't exist. As with all incident reports the intention here is to help prevent similar circumstances from being repeated.

Modifications listed in previous article

The main fuel outlet was moved from the lower left side of the firewall to the right; the gascolator was replaced with a fuel manifold and drain. This did not align well with the two EFI pumps so they were moved from a horizontal mid-firewall position to be mounted vertically above the relocated fuel outlet and manifold. The EFI fuel-return was also moved; the original plumbing through the firewall into the cabin-mounted header tank was replaced with a 1 liter canister in series with the fuel manifold.

Testing the Fuel Delivery Modifications

Each pump was statically pressure-tested, i.e. (engine off). The two pumps combined were statically pressure-tested. Normal operation was engine-start with the main pump; during run-up the secondary pump was switched on and left on for takeoff and climb. Typical engine run-up was to 4000 rpm, enough to get over the staging point.

On June 23, I was concerned about the pumps so extended my run-up to 4300 rpm.

Look close at Photo 1 to see details

The top hose with fire-shield is the 40 psi feed into engine fuel rail. The bottom fire-shielded hose is the fuel-rail return (low pressure).

June 23 Flight Plan

The PLAN was to climb to 2000 feet indicated over CYRP, circle the field to ensure all was well; my main concern was the fuel pumps. The airplane had been down for 10 weeks repairing the leaky right fuel tank and making modifications to the fuel system, so I was anxious to just fly it. After climbing at WOT to 2000' and completing one circle, I was confident that the fuel system



Photo 1: Engine installation

The fuel manifold is below the pumps; fuel inlet from header tank is on back side.

The pumps inlets are fed individually but tied together at the outputs.

There's a black fuel filter between pump outlets and engine fuel rail. The blue hose at bottom is engine oil-out to oil coolers. was okay. It was a beautiful, cool, calm morning at 7:30am; I couldn't resist the opportunity to just go for a short pleasure flight out over the fields north of the airport. I broke away from the flight plan and didn't follow another customary practice of flying one circuit to feel-out the machine.

Fuel Pump Problems

After enjoying the smooth ride for 10-12 minutes I realized that both fuel pumps were still on; it was customary to cruise on only one pump. I switched off what was thought to be the secondary pump the engine quit, so the pump was quickly turned back on. Astonished by this outcome I repeated it to be sure it was real and got the same result. Immediately turned 360 back towards CYRP and radioed inbound. About one minute later I thought I smelled fuel (tank repair, pump mods, pumps-cycled, etc), looked around for leaks and fire which thankfully didn't exist. I had time to think "I hope I make it back to Carp" and another 30 seconds before the engine quit and the prop stopped.

Glider Time

We pilots receive training for the forced approach, which is a good thing; my dad's method for this lesson was without warning to pull the mixture knob and say, "simulated engine failure". The first time you're talked through it; after that you're expected to react.

At 4.5 miles from CYRP with 1500' altitude, the 2+2's glide ratio of 11:1 would allow for 3.125 SM - not enough. My first thoughts were "you're a glider" and why isn't the prop wind milling. My reaction was to set the trim, call Mayday and fly the airplane. In front and on both sides were many corn and soya bean fields; it was a calming feeling to have many landing choices but it also delayed my decision to pick ONE. For some reason I didn't want to land into a farmer's field and destroy crops, so continued to glide straight ahead looking for another option.

At about 1 minute after engine-out I spotted a section of gravel road with no power lines and selected that as my landing spot. I lined up to the right for a normal downwind, base, final approach and selected full-flaps for minimum landing speed. Lined up on final there was a huge elm tree on the right edge of roadway, at expected touchdown point. Figuring this would shear off my right wing, at <100' AGL I made one more left turn out over the field which turned out to be the tallest corn in fifty miles. Gliding over the corn was a beautiful thing, all those straight rows helped to make a perfectly straight and level approach. Going into the corn was not so beautiful, everything disappeared; the stick was pulled all the way back and at the last second I braced my feet for a rough landing. In an instant I was looking at dirt and corn stalks yelling SHIT in conjunction with the sound of breaking Plexiglas, as the airplane went over upside down and abruptly stopped.



Photo 2: Upside Down for 1 Week

Aftermath

I wasn't physically injured – thanks to seat belts and mandatory shoulder harnesses for homebuilt aircraft!! My right hand reached out to brace the fall while releasing the seat belts upside down. After landing on my head, with the door already open I exited in a hurry. I don't remember hearing any electrical noise during descent but after exiting I could clearly hear the sound of a fuel pump, so reached back inside and turned off all switches – yes, in hindsight they should have been turned off before touchdown.

The airplane was bent; I was both upset and in shock walking out of the corn to the houses at the end of the field. Other than the too healthy corn, I couldn't have picked a better place to end up in such a predicament. The farmer was great; he was out back having a coffee and saw the whole thing unfold; he was right there to greet me with assurances not to worry about his corn. Phoned the police and my wife (not fun) and waited for them to arrive. Police contacted TC and the TSB; the result being a written statement and please return to the aircraft to disable the ELT. The 406 ELT was actually working.

Immediate Findings

Returning to the scene I was surprised to see oil all over the fuselage bottom and running down the sides. A Quick scan of the engine revealed the oil-out hose had blown off the connector; the connector was still firmly attached to the engine. I pushed the hose back onto the connector and it would not come off!! What I thought earlier was the smell of fuel was actually hot oil being pumped throughout the engine compartment. I then crawled

compartment. I then crawled back inside to turn off the ELT.

At this point I examined the wreckage more carefully. Both lift struts on the left wing were damaged and ribs below them crushed, the rudder was badly bent, the windshield was broken, 2:4 prop blades were sheared off, the spinner, cowlings and radiator were badly damaged. With oil everywhere I expected the engine and reduction drive to be toast. The fuselage and right wing looked pretty good.

Aircraft Recovery

The airplane stayed in the cornfield upside down for one week – I think the farmer felt it was best for me to leave it for a while. At first I was okay with it but after two days the thought of my bird stuck in the corn drove me crazy; I couldn't sleep or concentrate and had to take two days off from work. This gave me a chance to revisit the scene and organize an extraction crew. I had a bad feeling that the airplane touched down with the brakes locked-on; there were no tire tread marks in the soil, just skid marks. Five inch rudder pedals with four inch brakes on top, is not good ergonomics for twelve inch feet; see photo 3.

To all EAA 245 members and friends who were able to help: "Thank You". Once the airplane was out of the field and right side up, the crew had it apart and trailed in short order. The wings were put into my sister's trailer and with the rudder removed the tail wheel was set into my trailer-hitch basket for towing the fuselage back to the hangar.

Personal Recovery

I did a reasonable job given the situation and all the way through it expected a good outcome. So I will say it's not the near-death experience of the body that takes time to recover, it's the perceived near-death of the character that takes time to heal. All the if-only, woulda, coulda, shoulda scenarios haunt the mind. There was no one to blame but me; every decision made that day and every choice of nut, bolt, hose, etc came into play. To say I felt like an idiot would be putting it mildly. The first week was the worst; that time and getting the machine home made a world of difference; the damage being less than first expected also helped.

Initial Hypothesis

The engine-off/on interruptions sent two pressure pulses down the oil-out hose. The hose heated to 200F, ballooned just aft of the connector causing it to slip off the

Detailed Findings and Resolution

Left Wing – 3 badly bent ribs and all leading edge metal dented. The ribs were repaired; the leading edges when removed from the ribs popped back into shape. Left Lift Struts – destroyed – have to be replaced.

Right Wing – 2 slightly bent ribs and one leading edge metal dented - repaired

Rudder – badly bent – straightened with oxy-acetylene.



Photo 3: Rudder_Foot_Mismatch

barbs. There was no backup hose clamp as the product ("Twist-Tite" hose and connectors) is advertised to not need one. The newly installed fuel manifold delivered inadequate fuel to the primary pump causing internal damaged prior to cycling the secondary off/ on. The hot oil pumped out of the engine saturated the only functioning fuel pump and caused it to thermally shut down. The engine suffered from fuel starvation and operating for less than 2 minutes with minimal oil did not seize as first expected.

Reduction Drive – no apparent damage; prop hub run-out measured \pm - 0.001" – unit to be disassembled and checked. Engine – though compression is good it will be disassembled for inspection; expect main bearings and thrust bearings to be replaced as a minimum.

Fuel Pumps – "Secondary" fully functional; "Main" inoperable; when switched-on the voltmeter shows a large voltage drop followed by a solenoid click and return to normal voltage. Both pumps will be replaced.

Fuel Pump Testing

Initial assumption was the hot oil caused a thermal shutdown of the fuel pump; a simple test was conducted to check this theory: The pump was wrapped with a rag and boiling hot water was poured over it and the electrical contacts while operating. Surprisingly the pump kept running.

Perhaps the voltage-drop from the other pump caused a temporary shutdown of both? This pump was switched-on to check that possibility. The voltage drop didn't cause the operating pump to quit entirely but it did slow down.

Final Hypothesis

There is no definite answer as to why the engine quit; however, something was wrong with the fuel pump configuration that caused the primary pump to fail. These fuel pumps are supposed to be cooled by fuel, either by submersion within a tank or fuel-flow or both. Possibly the fuel manifold was fuel-limiting the primary pump causing it operate just below maximum temperature, combined with the hot oil bath it died. When the primary pump died, the voltage drop pulled down all the electrics including the secondary pump, at least long enough to starve the engine.

Future Plans

The plan is to repair the airplane and return it to flying condition. Since the radiator was destroyed and was providing marginal



Photo 4: Righted

cooling, it will be replaced with a slightly larger one. The new radiator will necessitate the new exhaust configuration as discussed in the previous article. The oil line which blew off the engine will be replaced with one of aircraft quality. Install 2 new fuel pumps similar to the original configuration – then test, test, test. Modify the Engine Run-Up checklist to confirm independent pump operation. Airplanes rarely need brakes; so any struggle should be in trying to get on the brakes and not to stay off them. Wag-Aero's "designed-formidgets" rudder pedal/brake combination will be modified.

The wings have been repaired and recovered, ready for painting. The reduction drive has been removed and close inspection reveals it to be in excellent condition. The engine has also been disassembled; first inspection revealed damage to the rotor and main bearings as well as some localized hot spots on the rear and center housings. Fortunately I have an extra set of housings and other spare parts to facilitate the rebuild. I'm going to give the Mazda Rotary engine another chance.

I hope to be flying MY PLANE again before the end of 2013. If and when it happens I plan to submit an article about that returnto-flight experience. In the meantime I have a lot of work to do and thankfully still have a good old Hound Dog to get us where we want to go.



Jeff Whaley EAA 313043

EXHAUST – from the Carb Heat Archives



The following was taken from Carb Heat.

30 YEARS AGO November 1982

In the Archives for $1982\,$ - an estimation of operating costs per year for "The Pietenpol"

Variable Costs	Per Hour
- Fuel 3.4 gph @ \$2.50/gal	8.50
- Oil (consumption) 2L/25 hrs.	0.16
- Engine O.H. \$3600/1600 hrs.	2.25
- Prop. Replacement \$300/1000 hrs.	0.30
- Instruments \$125/250 hrs.	0.50
- Magneto O.H \$250/1000 hrs.	0.25
- Fabric Replacement \$1200/2500 hrs.	0.48
- ELT \$75/250 hrs.	0.30
- Oil Change \$10.00/25 hrs.	0.40
- Spark Plugs \$15.00 ea. And 300 hrs. per set	0.40
- Brakes \$60/200 hrs.	0.30
- Tires and tubes \$374/400 hrs.	0.94
- Misc. parts and repairs	1.22
Total Variable Costs	16.00
Contingency Fund	2.50
For a total of	\$18.50

20 YEARS AGO November 1992

The new executive, as a result of the 1992 AGM, was introduced in the November/December Carb Heat as being: Gary Palmer, Supreme leader and composite guru extraordinaire; Rod Emmerson, Head lackey and filler inner par excellence; Tim Robinson, Chief blacksmith and fashion coordinator, Tim Robinson; Manager of gossip, fibbing and hot air (Carb heat) Andy Douma; Head hole digger, stake pounder and enforcer, Dick Moore; Head stamp licker and court jester, the writer Luc Martin. Lars Eif was thanked for devoting more time to the chapter than his Skybolt project during his tenure as president.

Sunday, November 8, 1992 the Chapter hosted a crew from CJOH's Regional Contact program. This was organized by Luc deSadeleer and members were looking forward to seeing some interesting film footage of Luc's RV-6, Gary Palmer's Lancair, Rod Emmerson's Teenie Two and other chapter aircraft on the TV.

The feature speaker at the November meeting was Wayne Chapin from Transport Canada. The topic – The Global Positioning System!

wayner@igs.net. Thanks.

Wayne Griese.

Canuck Formation Flight By Ken Potter

As everyone knows, EAA 245 is home to two of the remaining 70 Fleet Canucks still in existence. Both CF-DPZ and C-FDYP were built in 1946. DPZ is of course the late Jack Thorpe's plane, now owned by a partnership of EAA members, and DYP is owned by chapter member Mike Misener. I

don't know who first suggested the idea of a formation flight, but on October 21st it came to fruition.

As neither Mike nor I had ever flown in formation with another plane before, Dwayne Price came to the rescue with a simple, but safe flight plan. We would form up over Pontiac Airpark, I would fly "lead" in DPZ and Mike would form up on me with DYP. Dwayne and a cameraman would manoeuvre at will in his RV-6 (eh) and photograph this epic event.

We set course for Campbell's Bay and Mike quickly formed up on me. http://youtu.be/7SVD0PNZ8As

That's what I'm told anyways, because with the high wing on the Canuck I could not see him. Anyways, all went well until I noticed that no one was talking to me on the radio. Turns out I was transmitting ok but not receiving, sort of "half" NORDO. Once Dwayne confirmed with a wing waggle that he could hear me I felt comfortable continuing with the flight.

The flight to Campbell's Bay was into a 25 mph head wind. In a Fleet Canuck that translated to a ground speed of about 70 mph.... it was along flight with my passenger The turn at Campbell's Bay back towards Carp was a real neat lesson in "illusion created by drift". In the 25 mph wind it felt like we were flying sideways and the flight back was as fast as the flight out was slow. Arriving in the circuit at Carp, the sun was shining and the steady wind straight down 28. We



asking regularly "are we there yet". As we roared our way to the West, the ceiling slowly lowered and it began to rain on and off. All the while, Dwayne was circling and taking pics. http://youtu.be/iXdf6mDanP0

One could never tell were Dwayne was going to show up next, from below and above, from the left, or right; he'd just pop up in my field of vision with his RV in what must have been in "slooooow" flight. landed with a 25 mph ground speed and, on final I swear there were golf carts on the golf course below going faster than us. All in all though, a great flight, and thanks to everyone that made it happen, especially to Dwayne for the planning to ensure we did it safely.

Ken Potter

EAA Hosts 194th Barrhaven Girl Guides! By Dwayne Price

What was otherwise a very cold miserable fall morning, turned out to be a great success for both EAA and for 194 Barrhaven Girl Guides.

Having reviewed the material necessary to obtain an aeronautical badge in Girl Guides, a lesson plan was developed, pamphlets and presentation material prepared, and a group of volunteers stepped up to make a very memorable day for the 194th Barrhaven Girl Guides.

WO2 Devon Price. Commander Squadron 51, started off by teaching an introduction to aeroplanes. He covered airfoils, four forces, aircraft rotations, and centre of gravity (CG).



Communication, Clearances, and the phonetic alphabet.

Devon Price was up again, now teaching how to read a METAR and a TAF.

The final portion of the morning was aircraft familiarity. In order to achieve their

aeronautical badge, the guides had to become familiar with four help from John Montgomery, Jim Ferrier, Curtis Hiller, Scott Clark

The guides passed an exam at the end of the day demonstrating their

different types of aircraft. With & Dwayne Price, this too was achieved.

knowledge. Huge success!

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Joined by Scott Clarke from NAV CANADA & Stetson Flyers, the two went on to teach major Components: Fuselage, Wings, Empennage, Landing Gear, and demonstrated the movement of all control surfaces using a RC model.

Next up was Dwayne Price who covered airports, windsocks, runways and taxiways. Jim Ferrier from NAV CANADA then joined Dwayne and the two of them covered Air Traffic Services, Air Traffic Control, Flight Services,



Humour picked up by Alfio Ferrara

During our cross country trip last month, we made a several day stop in Sedona AZ. A nice little touristy place to visit there is Jerome, a former mining town. One of the shops had this in their window:



For Sale or Rent

Place your ads by phone with Yvon Mayo 613-830-1935 or e-mail to <u>yvonmayo@rogers.com</u> or <u>eaa245@gmail.com</u> 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.

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 <u>SicardPL@xplornet.com</u>

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

FOR SALE

Tom Smith's 1950 **Piper pacer PA-20**. TTSN 5110 hours. 0-320 975 Hrs SMOH, 406 ELT, two ICOM A200, Aero ski 2000 available. Price: \$25,000. Contact Rollie @ 613-830-5346 or Charlie @ 613-487-3036.

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

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 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.

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 <u>dstroud@xplornet.com</u>. To check on field conditions 24 hours prior to the event call Dave Stroud at 613-489-2347.

СПАЖА 245	Experimental Aircraf Chapter 2 Membership Application New: Renewal: Date:	t Association 45	Make cheque payable to: EAA Chapter 245 (Ottawa) P.O. Box 24149 300 Eagleson Road Kanata, Ontario, Canada, K2M 2C3
Name:Address: City/Town: Prov: Phone:() Email: Newsletter Distribution Email or Canada F Aircraft & Registration:_	PC:W H()W Preference: Post	Annual Dues: Janu (prorated after Mara subscribers). Newsletter Su Newsletter only Associate Me Newsletter plus Full Member:_ Newsletter, har (Note: there is a	ary 1st to December 31st. ch 31st for new members / ubscriber : \$35.00 / mber : \$35.00* s Chapter facilities \$70.00* ngar, workshop, tiedowns. a one time \$200 initiation fee
Aviation Affiliations: EAA Number COPA: RAA: OTHER:	EXP Date:// UPAC:	*Note Associate and full members must a members of EAA's parent body in Oshkos USA	