



## NEWSLETTER

# Carb Heat

Hot Air and Flying Rumours

Vol 31 No. 6

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## June 2001

### *Inside:*

President's Page: by Gary Palmer

Event Calendar

Kursefox (Part 1) by Russell Holmes

U.S. Border Crossing & Extended Canadian Medical Problems

Classifieds:

### *Next Meeting:*

**Saturday, June 16, 2001 10:00AM**  
**EAA Chapter 245 Hanger, Carp Airport**

### Featuring:

**Oshkosh Preview**

**Note: This months edition was prepared by Russell Holmes so don't blame Charles!**

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**President's Page by Gary Palmer**

The flying season is now in full swing with both the Embrun and Smiths Falls fly-in breakfasts behind us. The weather gods are certainly not cooperating so far with low ceilings keeping the attendance down at Embrun, and washing out the Smiths Falls event although drive in attendance was good. The **99's Poker run**, which normally coincides with the Smiths Falls event, was **postponed** and will be rescheduled.

**May 26 Chapter cleanup a big success**

Saturday May 26<sup>th</sup> was our annual chapter cleanup day, and it was a great success with the rain holding off long enough to complete the exterior painting in addition to cleaning up the shop and disposing of the inevitable mounds of garbage. A big thank you to the many members, both new and old who helped make the day a big success!

**July 1<sup>st</sup> Canada Day**

Sunday July 1<sup>st</sup> we will as usual have both a static display of aircraft and an indoor display at the National Aviation Museum. Once again, Curtis Hillier, and Martin Poettcker will be coordinating this event on your behalf and will appreciate volunteers willing to devote a couple of hours manning our indoor display. This is a great fun event, and one of the cases where there truly is a free lunch; it's so much fun it never feels like work. So please contact Martin at 271-6113 and join in on the fun. (At the event two years ago they let anyone climb through the Museum's Liberator for free!)

**August 11<sup>th</sup>/12<sup>th</sup> Carp EAA 245 Fly-in breakfast**

Saturday August 11<sup>th</sup> will be the preparation morning, and Sunday August 12<sup>th</sup> the big event. Be sure to mark your calendar and sign up early to help out. **Stan Acres** is still looking for an **understudy** so he can have a well-earned rest next year. I strongly encourage you to please consider stepping forward and take on the role of Grande Chef. Stan has a smooth machine and process that is very easy to pick up, so don't be shy, give Stan or any member of the Executive a call to volunteer.

**August 11<sup>th</sup> RV-6 project visit and barbeque following Breakfast setup.**

Following the Saturday August 11<sup>th</sup> breakfast setup, **Russ Robinson** has kindly offered to host another chapter visit to see his RV-6 project that is on the last 90%, having passed the first 90% milestone. This is scheduled to reward those volunteers that show up in the morning to help in the setup for Sunday.

**Canopy Tales, the proof of the pudding takes flight**

While **Martin Poettcker** was the first to succeed at blowing an acrylic canopy for his Zenith CH-600; **George Elliott** was the first to fly. Of course George cheated a bit by breaking a perfectly good canopy on his amphibious CH-300, necessitating the new canopy. George set a new standard for persistence, and those involved in the cleanup, know what I mean. While, the first attempt is a bit thin in spots, it is flying, and George will wait to the end of the flying season before applying all his hard earned knowledge to create a final piece de resistance for his bird.

**Looking for volunteer as Newsletter Editor**

**Charles Gregoire** has indicated that he wishes to pass the newsletter editor's reigns on to new blood after doing an exemplary job the past four years. This is one of the most important roles on the Executive, so we are advertising early to allow an understudy to step forward well before the October elections. Contact Charles or any member of the executive to volunteer.

**Saturday June 16th meeting @ Carp Clubhouse 10:00 AM: Oshkosh Pilgrimage Planning**

Our Saturday June 16<sup>th</sup> meeting will be held at 10:00 AM at Carp and feature the Oshkosh Arrival procedures video. This is a good chance to learn what it is all about and plan rendezvous procedures for the big show. The July meeting will be Saturday July 14<sup>th</sup> ; recognizing the early start for Oshkosh this year (July 24<sup>th</sup> to 30<sup>th</sup>). See you there.

**Gary**

**Events**

**June 17, Cornwall Ontario:** COPA Flight 59 & Cornwall Flying Club annual Father's Day Fly-in breakfast at Cornwall Regional, CYCC. Breakfast served from 8:00 a.m. until noon. For information contact Stephen Small at 613-931-3311.

**June 24, Belleville Ontario:** COPA Flight 53 & Quinte/Belleville Flying Club fly-in breakfast, spot landing, flour bombing, antique car display, all welcome. For information contact Gary Pruner at 613-966-6320.

**June 27, Arnprior Ontario:** Snowbirds event.

**July 1, Rockcliffe Airport:** If your not up to participating in the displays at the air museum as mentioned by Gary, the Rockcliffe Flying Club is hosting a breakfast and fly day. All are welcome. For information contact Simon Garrett at 613-746-4425.

**July 1, Brockville Ontario:** The Brockville flying club will hold a fly-in breakfast and a young eagles event. Everybody is welcome. For information contact Roy Charlton at 613-342-0079.

**July 15, Arnprior Ontario:** COPA Flight 33 will be holding their annual fly-in breakfast from 7:30 a.m. until 11:30 a.m. at the Arnprior Airport. Contact Wilf Schwartz at 613-623-7897 or Jonathan Chapman at 613-623-7231 for information.

**KURSEFOX*****The Ordeal Experienced by Russell Holmes After Purchasing a Completed Kitfox Model III  
(Part 1) by Russell Holmes***

Hi my name is Russell Holmes and I like to fly my Rotax powered Kitfox on Sundays. My mom tells me I shouldn't be flying on Sundays.... I should be in Church praying. Ma! I tell her...I've been in Church ...and I've been in the Kitfox...believe me Ma I do more praying in the Kitfox!!!!!!

Well I had my first flight in 2001 in my Kitfox and didn't experience any problems. With a total of 47 hours on the Hobbs since purchasing it in 1997, I now have a total of four wonderful trouble free hours in my Kitfox and I doubt very much that I'll be featured in Sport Aviation's "What are members are Building and Restoring". After all whenever I read about the Kitfoxes everyone else builds they always seem to write "my Kitfox took 15 months to complete....excellent factory support....flew off the time in two months....have 100 hours on it this year....." Where do these people come from?

**A bit about myself**

I don't think I was much older than five years old when I first started dreaming about owning and flying my own airplane. I even dreamed of keeping it on floats at my Grandmother's cottage. Dad wasn't interested in airplanes, only golf and skiing so I had to pursue my interest in flying on my own. So in the mid sixties I discovered the world of model airplanes and started building rubber powered airplanes, my first was a Stirling Crop Duster. It was called an airplane and when I finished it even looked like an airplane but when I launched it, it sure didn't fly like an airplane. That's when I learned all about C of G and balance.

So for a few years I built some more until I saw some control line airplanes some kids were flying and I vividly remember dreaming about buying a Cox PT-19. I saved my allowance and in 1970 I found one at Consumers Distributing for \$10.80. I had fun with that one and bought and built several other control line airplanes as well.

World War 1 aircraft were always my favourite airplanes, especially the Fokker triplane and the SE5a and I often wondered what it would be like to fly one. I found out about Radio Control and in 1976 I set my sights on saving enough money to purchase a two channel radio for an 049 powered Mini Mambo. Back then I didn't have an instructor so I taught myself to fly Radio Control which is quite a challenge in perseverance as the first few flights ended in disaster and could have easily discouraged someone with only a casual interest.

Around this time I realized that if I were to ever achieve my ultimate goal of owning an airplane I would need an above average salary and so I planned to acquire a Degree in Mechanical Engineering. Eventually I mastered Radio Control and enjoyed many hours flying my airplanes, including a 1/4 scale Fokker Triplane. I belonged to two clubs and won a few trophies.

I kept track of all my model airplanes and have a list somewhere of about 100 that I have built and flown. In the mid 80's my interest in the models diminished and I decided to go for my ultimate goal, my private pilots license which I did and I rented mostly Cessna 150's for the next 10 years.

While flying 150's I experienced three occasions where I nearly lost the engine. By the mid 90's flying the 150's had become routine and you couldn't rent a floatplane so I decided that the time had come for me to purchase my own. It was the experience with the engine problem that convinced me that even certified engines can let you down and therefore a new non-certified engine such as a Rotax might be just as good as an old certified engine such as a continental and much less money. Also I hadn't heard of anyone having difficulties with the Rotax.

In 1995 I went to Oshkosh for the third time and grew tired of seeing everyone else's aircraft. I vowed I would not return until I had my own airplane.



### Which Plane to Buy

Selecting the right airplane for me ended up being an exercise in cost-effectiveness. I created a spreadsheet and tried to estimate all the various costs and other variables associated with each aircraft under consideration. Points were given for the costs and capabilities and three designs came out on top. They were the Avid Catalina, the Challenger II and the Kitfox. Having built so many models I had no concerns about being able to build an airplane but I knew that it would be tough in the one car garage and small basement that I had. My biggest concern however was me, I knew from experience that I can generate lots of enthusiasm for a project for only about a year or two, not nearly long enough for an airplane construction project.

Therefore while I was trying to decide which kit I was going to buy I also decided to look for one already built. Unlike the US, in Canada you can purchase someone else's homebuilt and do the maintenance and annual inspections. Not long after I received the information packet on the Challenger and watched the wonderful video they have, my enthusiasm for the Challenger grew to the point that I was starting to make plans to buy one, with room to construct and hangering the only concerns. After a C-150 flight at Westair in April 1997 I started talking to a stranger about the airplanes I was interested in, and he told me about a Kitfox out at Kars that was for sale. My plans for the Challenger were put on hold until I checked into this opportunity.

### Kitfox Purchase

Well I called the seller and sure enough the plane was still for sale so I arranged to see it. To make a long story short, in the back of his hanger was the plane with it's wings folded and a tire flat. It looked brand new, and it was, with a total of 2.7 hours of airtime recorded in the log and having only been completed two years before. The engine was a Rotax 582, which is a two-stroke engine with dual ignition, water-cooled, rotary valve intake, two carburetors, oil injection and a speed reducer producing 64 hp at 6800 RPM with a TBO of 300 hours. I made an offer a bit less than the asking price and made it conditional on having the airplane inspected and a satisfactory flight in it. The offer was accepted. Due to the "NO Passengers" restriction on the airplane however we concluded that I would have to do the test flight solo.

### The Inspection

Well I've read lots of articles about how you should get an AME to inspect your aircraft before purchasing it so I got on the phone and called the few that I knew and got the same answer from all..."What?... it has a Rotax!.....no thanks!...those engines are highly stressed...not interested!" So much for that advice! A few months earlier I had a flight at Embrun in Mike Ryer's Rotax 618 powered Genesis and he had kindly offered to have a look at any prospective purchases. So with that I called him up and he came to the hanger with his wife, flying his Rotax 618 powered Genesis. He looked over the plane, liked it, recommended I buy it and then hoped in his plane and headed for home.

Mike's Rotax had about 380 hours on it and no sooner than he got over the end of the runway the RPM's went way up and the thrust went way down, along with the Ryers and their Genesis. Mike and his wife had to ditch in the Rideau River. Well I'll tell you its not a good feeling to see a friend who's just come to do you a favour, crash his airplane on the way home and for 10 minutes we didn't know if they were OK or not, but fortunately they landed at a low speed into shallow water and came out with very minor injuries. The propeller shaft had fractured due to fatigue, which caused the loss of power. I think that evening every 911 vehicle in Ottawa-Carleton came to the Kars airport that evening, lighting the place up in the process.

I still wanted someone experienced with these engines to look it over. No Rotax aircraft mechanics were in the area but I got the name of a Skidoo mechanic who would help. Well he sent out his partner to check out the motor. I knew I was in trouble when he asked me what I wanted him to do? "Check out the engine" I said..."have a look inside...is it new or old...are there any problems I should know about?" He looked it over, suggested the fuel pump be mounted horizontally and then listened to it run but didn't notice any problems. After paying the predetermined price I concluded I had likely just wasted my money.

### Tail Dragger Training

At Embrum with Lawrence Gladhue in a Citabria I started my tail dragger training. With 150 HP and the high weight, the Citabria was smooth and predictable. After 93 take-offs and landing I was deemed to be "competent". But the Citabria wasn't a Kitfox so I found out about a Kitfox kept at Maxville, owned by Harvey Metcalfe and arranged for a flight. Up we went and I got my first try at the controls of one. Controls were very responsive and light and with all those windows there was quite a view. The flight wasn't long as Harvey didn't like to land in a cross wind which was increasing so we headed back for one of Harvey's three pointers. Harvey wasn't in a position however to provide further training so I was set up for lessons in a Pelican Club with a Rotax 582 back at Kars. David Graham was the owner and a very experienced professional pilot and I enjoyed another 69 take-offs and landings in his ship. The engine appeared rock solid and reliable and the Pelican had heavy ailerons but was very smooth.

### The First Flight

On July 13th I was ready for my test flight in the Kitfox. Both the owner and his helper were on hand. In a Rotax you have to keep an eye on the exhaust gas temperature or EGT to ensure it doesn't go above 1200°F, anymore and you're told the pistons will melt. Great..that's just what I need!!! The helper told me that because during testing, the EGT had gone above 1200°F he had increased the size of the midrange jets to compensate. I started the engine and was told to idle it until the coolant had reached the required temperature. Idle by the way is 3000 RPM and anything less made the engine run rough or "four cycle", as we modellers would say.

After a long 10 minutes the required temperature was reached and I prepared for take-off. Just before taking off the helper warns me "If you don't get 6600 RPM about the flight!!" With that in mind I advanced the throttle and in no time the aircraft lifted off. By the time I looked down to check the RPM I was at about 50 feet up and the RPM's were only about 6400. I thought that if I cut the throttle I would hit the trees before stopping. The engine seemed to be running fine so I pressed on. Up I went and stayed over the airport for an hour. During the flight I noticed that every 10 seconds or so there was a small shudder. It felt like the landing gear had slop and the wind was buffeting it a bit. The tachometer didn't move so the engine wasn't suspected. The fuel also didn't seem to flow from the fuel tank and the EGT stuck close to 1200°F.

I had a great landing and was just too enthusiastic about the plane to reject it for minor details as these and accepted it. The helper also assured me that the fuel had flowed for him. Now I had to find a place to keep it.



I just bought this beautiful Kitfox and boy am I gonna have fun!!!!!!.

## EGT

In the meantime I called Rotax and a well-known ultralight dealer about the high EGT temps and was told to check the location of the EGT probes, the jetting and the timing of the engine. The probes checked out fine but I didn't have the tools needed to check the timing. The gauge was sealed and no wiring diagram was included in the documentation I was given. The jetting was as rich as I could set it.

## Hobbs

After only a few flights I noticed that the Hobbs would only run when the RPM's were over 3000 RPM. Not wanting to have to deal with an incorrect Hobbs reading on every flight I disconnected the bridge rectifiers that were supposed to stop and start the Hobbs when the engine was running. I connected the Hobbs to the Master switch instead.

## Familiarization

Well it wasn't long after the flight that I heard that Dave's Rotax with about 360 hours had quit on take-off and the airplane was stuck in Iroquois. Dave's hanger was available while the engine was being repaired. The problem was caused by the fracturing of the shaft which drives the rotary valve and the water pump. Well maybe the secret to these engine is to conform with the TBO of 300 hours.

A few weeks later I heard that the Rotax 582 in Harvey Metcalf's Kitfox had quit just before reaching an airport. Fortunately Harvey came out all right but the plane was badly damaged. At the time the engine was suspect but no problems could be found. Years later Harvey now thinks the finger strainer in one of the tanks had plugged as one tank was dry and other was still full after the crash.

Had all these failure occurred before my acceptance flight I likely wouldn't have purchased the plane.

Stay tuned to next month for Part 2 of the story and don't worry.....**it gets worse!!!**

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## U.S. Border crossing Gotchas

The following response from Adam Hunt at COPA to problems encountered by fellow member Uwe Stickel highlight a potential problem with our extended interval medicals for pilots crossing the border, who are unfortunate enough to get the "full document check" routine.

Dear Uwe,

Thanks for your e-mail there about your recent border crossing problems. It does sound like you had a rough time with the US authorities.

In answer to your question about medicals the official you talked with was correct. The new Canadian rules allow pilots under 40 to go five years between Category III medicals. The USA, as a signatory to ICAO, requires that all pilots have a medical every two years maximum. If you are under 40 and plan to fly in the USA then you will need to have a medical every two years. When you turn 40 this will no longer be an issue as both the US, Canada and the ICAO rules will all require a medical every two years. This isn't really a penalty for under 40 pilots as the previous Canadian rules required medicals every two years anyway. The COPA initiative that resulted in the extended periods gave away nothing over the previous rules and, as long as you don't fly in the USA, resulted in some good savings.

Hopefully our colleagues at AOPA can give you an answer to your questions about Byzantine US border crossing problems. Otherwise I hope that this answers your questions.

### Classifieds

Place your ads by phone with Charles Gregoire @ 828-7493 or e-mail to [cbgregoire@sympatico.ca](mailto:cbgregoire@sympatico.ca)  
Deadline is first of the month. Ads will run for three months with a renewal option of two more months.

**For Sale:**

One-Large fish tank, recently manufactured and never used. Material is 3/16<sup>th</sup> GP Acrylic Plexiglas that is used in bullet-proof operations: therefore you can keep sharks or MBA's in the tank. Capacity is about 42 gallons Cdn. Any resemblance to a canopy for a Zenith CH300 is strickly accidental and no unreasonable offers will be refused. For further information, please contact any member of Chapter 245 since everyone has worked on the damn project.

George (no canopy) Elliott      613-592-8327      05/2001

**For Sale:**

McCauley Propeller 72" 8 bolt (used on O-300) call

Jim Robinson      613 830-4317      05/2001

If anyone would like to borrow a fuselage jig for an RV-6 or and RV-6A call

Jim Robinson      613-830-4317      05/2001

**Wanted:**

Wood propeller for Lycoming O320 E3D 150 hp for use in Thorp T18-Similar performance to RV4-6 (May consider metal propeller depending on make and model).

Lionel Robidoux      613-738-1066      04/2001

New T-hangar for Rent

Carp Airport

Call Ken for details at

839-2861

04/2001

**Tim's Parts Bin**

- Federal 1500 Skies, New old stock, no rigging      \$800.00  
- Continental O-300 Parts, Case, Acc. House, Sump, Cam, Rods and internals. NO CRANK      \$200.00  
- Continental O-200 Bottom end, Crank and Case Assembly, no cylinders or accessories, no logs or data plate. \$1500.00

Tim Robinson      613-824-5044      04/2001

**For Sale:**

TKM INC (A.K.A Michel Avionics) MX-300 NAV/COM Direct slide in Cessna replacement digital flip\_flop radio  
- Comm - 760 Channels 118,000 to 136.975  
- Nav - 200 channels 108.00 to 117.95 MHz  
- Preselect channel storage capacity – 100

Tan colour faceplate.

MX 300 will directly replace the following units: RT308C, RT328A, RT328C, RT328D, RT328T, RT528A, RT528E, RT508A.

Check out this website for a review of this radio:

<http://www.avionix.com/rev-tkm.html>

Like new with manual. Asking \$1900.00 Cdn

Call Stuart Banks for details. 613-836-6996

[sbanks@catena.com](mailto:sbanks@catena.com)

04/2001

**For Sale**

Edo 1340 Floats J3 rigging, 1500 Fed skis teflon bottoms, Baby Ace 75% complete, radios, Aeronca parts, randolf dope, AN mil spec hardware (too much to list), props, Rotax 912 parts, Come and see and make an offer, Must Sell!!!

Larry Loretto      613-675-2301 or 613-737-2933      06/2001

**Wanted**

Old outboard motors, parts, manuals and memorabilia, Mercury, Johnson, Elto, Chrysler and Champion

Russell Holmes      613-820-8572      06/2001

Married to a "99" who talks continuously when you're trying to build?

"Get Smart" and buy a "Cone of Silence"

George (agent 86 attempts) Elliott 613-592-8327 06/2001

## Articles Wanted

I am always interested in receiving submissions for this, your Newsletter. You may bring articles to the monthly meetings, or mail information to the post office box, or send me an e-mail attachment at:

[cbgregoire@sympatico.ca](mailto:cbgregoire@sympatico.ca)



**EAA Chapter 245 Membership Application**

NEW:\_\_\_ RENEWAL:\_\_\_ DATE:\_\_\_/\_\_\_/\_\_\_  
 EAA NUMBER:.....  
 EXP Date:\_\_\_/\_\_\_/\_\_\_  
 NAME:.....  
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**Annual Dues:** January 1st to December 31st. (porated after March31st for new members/subscribers).  
 Associate Member \_\_\_: \$30.00 Newsletter plus Chapter facilities  
 Full Member: \_\_\_: \$55.00 Newsletter, hangar, workshop, tiedowns. (Note: there is a one time \$200 initiation fee when you become a Full Member)  
 Newsletter subscriber \_\_\_: \$30.00 Newsletter  
 Note Associate and full members must also be members of EAA's parent body in Oshkosh WI, USA

Make cheque payable to:  
**EAA Chapter 245 (Ottawa)**  
 Mail to - P.O. Box 24149, 300 Eagleson Road, Kanata,  
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