



**NEWSLETTER**

# *Carb Heat*

**Hot Air and Flying Rumours**

**Vol 27 No. 9**

**Published by EAA Chapter 245 (Ottawa) P.O. Box 24149 Hazeldean R.P.O., Kanata, Ontario, Canada, K2M 2C3**

## *October 1997*

***Inside:***

**President's Page: by Gary Palmer**  
**Kitplanes, Kitplanes, Kitplanes by Curtis Hillier**  
**Proper Engine Break-in by John M. Frank**  
**EAA Chapter 245 Flies 71 Young Eagles by Lars Eif**  
**Classifieds:**

***Next Meeting:***

**Thursday October 16, 1997 8:00 PM**  
**Aviation Museum (Bush Theatre)**

***Topic:***

**Aircraft Owner Partnerships**

|                                 |                           |                 |                                  |
|---------------------------------|---------------------------|-----------------|----------------------------------|
| <b>President:</b>               | <b>Gary Palmer</b>        | <b>596-2172</b> | <b>gary.palmer@nortel.ca</b>     |
| <b>Vice Pres:</b>               | <b>L. DeSadeleer</b>      | <b>727-0285</b> |                                  |
| <b>Ops , Publishing, Tools:</b> | <b>Dick Moore</b>         | <b>836-5554</b> | <b>rjmoore@uottawa.ca</b>        |
| <b>Membership:</b>              | <b>Barney DeSchneider</b> | <b>225-6003</b> | <b>bdeschneider@sympatico.ca</b> |
| <b>Secretary:</b>               | <b>Luc Martin</b>         | <b>744-5347</b> |                                  |
| <b>Treasurer:</b>               | <b>George Elliott</b>     | <b>592-8327</b> | <b>gelliott@igs.net</b>          |
| <b>Editor:</b>                  | <b>Charles Gregoire</b>   | <b>828-7493</b> | <b>cbg@nortel.ca</b>             |

This past weekend has seen the start of a glorious Indian summer, with the fall colours at or near their peak. On Sunday October 5th, it seemed like the whole Ottawa Valley flying community decided to descend on Smiths Falls for breakfast. The wait for breakfast was long, yet enjoyable in the company of friends.

Sunday was also another milestone in my personal flying career, as I soloed Luc DeSadeleer's beautiful RV-6 before a critical, some might say sarcastic, audience of my peers. After some ten hours of dual mandated by the insurance company, I can now lay claim to the title of tail dragger pilot. Flying the RV-6 reinforces all the positive impressions I have held of this fine homebuilt. It certainly is the best overall performer, and value in my book. Having said that, the Lancair will always hold a special place in my heart.

### September Meeting

The September meeting featured Joe Scoles as our guest speaker. Joe filled us in on several safety issues that were part of his Oshkosh 97 presentation. This was a very cogent follow on to my discussion of my forced landing in the Lancair, and the unfortunate fatal RV-6 accident which took Larry Week's life at Brampton just prior to our meeting.

### October 16th Meeting

The next meeting is being held **Thursday, October 16th at the NAM Bush theatre, 8:00 PM.** In addition to our usual executive elections, we will have a panel discussion among our members on the pros, cons, and how to's of joint aircraft ownership partnerships. This is an excellent way to still enjoy the benefits of flying your own aircraft, while sticking within a

budget in these tight financial times. I look forward to seeing you there!

### Forced Landing Follow-up

If you read last month's letter, you know that on Sunday August 17th at approximately 10:00 AM I had a sudden catastrophic blade loss on my three blade NSI CAP hub in flight some 10 NM south of Carp with less than two hours total flight time on the prop.

I have taken the prop into the TSB labs for failure analysis. While I had hoped that the analysis would be complete by now, unfortunately the metallurgists are all busy working on a high profile western train wreck. The initial disassembly by the TSB lab indicated that a second blade was a hairs breadth away from failure as well.

I have also posted to RAH on the internet to warn others and seek input from other users. The results of this have been both illuminating and frustrating.

The initial posting resulted in a response from Paul Messenger, an EAA Technical Counselor, precipitated by NSI's reaction to the photos I had sent them that the failure was a result of improper assembly, and identical to two other failures in Europe. Of course I had taken great care in assembly, following directions to the letter, and not forcing anything, a fact I posted in response to Paul.

This was the start of some excellent investigative analysis by Paul over the course of several emails; an analysis made easier by the fact that Paul is a retired aeronautical engineer who had just bought, yet not flown an identical prop. After much careful analysis of his unit, Paul discovered a serious manufacturing error, in that the outer support bearing was .010 inches oversize. This meant that all torsional and blade vibration

forces were concentrated on the flange and stress relief groove where my cracks started. While Paul is convinced that this is the cause, NSI still claim there is no problem, but apparently intend to recall hubs from our production run.

NSI still claim, my failure is the only one, although I did receive an email indicating there was another in flight loss of a blade on an EA81 equipped Kitfox. I posted this second hand information together with the preliminary analysis done by Paul on the Internet, as well as faxing both NSI and Warp Drive.

You can imagine my surprise when NSI verbally threatened to sue me for publishing inaccurate information re another failure. My sources had indicated that there was a gag order on the specifics of the case. So far I have not been served with any legal papers, but it certainly shows how far some companies will go to control information.

As I stated before, I thought I had done my homework, but you really have to be careful with new products, particularly in critical areas! I only wish I had listened more closely to some of the NSI scuttlebutt, I might have avoided a very costly, and dangerous mistake.

Fly safely.....Gary

## A note from the Editor

There was an error in the September issue that resulted in two pages being omitted. This is why the last 5 or 6 paragraphs of Curtis's article, Lars Eif's article, and the classified Ads were missing. I have included Curtis's and Lars's articles in this issue.

## Kitplanes, Kitplanes, Kitplanes

By Curtis Hillier

I hope many of you find this article of interest. I really should be making the pieces I need for my CH601HDS. In the recent past, I have been battling with the issues of what engine I will use in the 601. Zenith claims anything from 65Hp to 100Hp is OK. The aircraft is docile to fly and has a wide C/G so fitting something a bit heavier or lighter is not as big a deal as in other relatively light aircraft.

While the reassurance of an air-cooled aircraft engine makes sense to this certified only flyer, the affordability and knowledge which comes from rebuilding your own auto conversion is very appealing. I am building an experimental and would like to know as much as possible about every aspect. (Yes I am hammering out all of the metal pieces!)

This article is not about the 601, or engines, or hammering endless bits of metal, rather as I looked for a reputable supplier of Subaru, Honda, Volkswagen conversion kits on the internet I began to realize just how vast the Kitplane industry is. No, I don't mean that there are literally hundreds and hundreds of designs, I mean that a surprising number of these people have "web" sites.

I have asked several people which sites have an abundance of information and to my surprise many of us do not surf the web! I cannot understand why more of us aren't surfing instead of flying, OOPS, that sort of answered itself!

As I look for my engine and bits to finish my scratch built bundle of metal, I thought I'd pass along my personal findings to those who are interested in reading. I will try to do a monthly list of new sites I have visited and what I found when I "looked" around. As I said previously, many of the Kitplane sites are new so many of the "Links" are not accessible. A LINK is a word of phrase that takes you to that topic. Many sites will link you to the major supplier of parts of that design or related FAA/DOT info for instance.

This article also got started as we fielded questions from the youths and parents at the recent display July 1, 1997 at the Aviation Museum. When I talked about surfing the kids clicked right in and I was amazed how many said

they were going home to "research" the topic. A piece of info I passed along to many was the web site for the US-Aviator. (Those of you who are "read-a-holics" and buy every home built magazine there is, will find WWW.us-aviator.com very interesting, ... yes I'm guilty! I calculate if I had put the money into metal I'd have built a few 601's by now!) There used to be and will soon be again a magazine published. It should be arriving at the news stand soon. This magazine has a reputation for "telling it as it is" and tends to evaluate suppliers and Kitplane designs as to their customer support, many are not all that reputable so this magazine is in trouble much of the time. This is the reason it has been out of print for about 8 months! These people are also the ones who put out the "Kitplane Resource Guide" which evaluates almost all of the most popular designs available. The second edition of this 1000 page wonder is in press right now and will be available shortly. It costs \$39.99 US and can be ordered using either MC or VISA at 1-800-356-7767. This is a highly recommended resource for anyone wanting to know about anything to do with Kitplanes. I will definitely be buying one so if you are interested in seeing before buying let me know and when I get it I will bring it to a club meeting and pass it around. No you cannot borrow it! The web site also has up to date articles listed with brief summaries. Here is a sampling for this month: "BRS tests Cirrus SR20 chute", "Full Lotus floats on SB-582", "AOPA Opposes Continental crankshaft AD proposal", Thunder Mustang vs Pushy Galoreo, etc, etc, etc, .... This is a great site!

Of course those who are into Zenairs must visit WWW.zenithair.com Some of the links here were not ready when I visited. It is amazing what a difference a few days makes though when a new site is launched.

Pictures and completions are us! This site has an incredible quantity of builder photos and factory photos. All are about 15K in size and download in 30 seconds at my modem speed. If you are a registered builder and give your assigned serial number, they give you builder support.

Kitfox builders should check out WWW.skystar.com info on all product lines including the newly acquired pulsar. This seems more of a sales site than a builders hot line at the present time.

Of course EAA's must visit WWW.eaa.org

Helicopters? WWW.revolutionhelicopter.com An incredible site which even lists accident reports so you do not have to make all the mistakes yourself! (Sorry, I sort of stole that line from the aviation safety news letters.)

or WWW.rotorway.com As you might expect of a first class product has a first class web site well maintained.

Need parts? WWW.aircraft-spruce.com WOW what a site, very professionally done with an introduction by the pres! The site is easy to navigate and promises to have the entire catalog with graphics on line. They say their new catalog will be out for Oshkosh 97. The on-line menu

system even has a search function: type in the name of the what-cha-ma-call-it (I tried "Epoxy") and whoosh there you are price, statistics, available sizes, my gosh I was impressed! Even links to related components such as composites, Whew! Drawbacks? yes when I typed in "rivet" it died! It turns out that they are updating every two weeks and so far only two sections of the catalog exists. A very impressive start though, and a promise to maintain it. If you cannot find what you want with the search engine, you can browse the table of contents just like you would the paper copy. Yes you can even order the paper copy from the site. I am still a bit nervous about sending my VISA/MC over the internet, I personally will stick to the 1-800 number for now. The site really gets you the most up to date info and pricing though.

Need a Subaru? WWW.crossflow.com, A Canadian company in the business of engines since 1951. They have four basic engines based on the Subaru. Three of the six possible links were incomplete when I visited. The basic info and characteristics of the engines were available as well as a background on the company and product line. This is an immature site and no doubt will either go un maintained or updated casually. This site, while having useful info, looks more like a bunch of guys who wanted to make a quick net site and left it at that. I have visited the site several times over four weeks and saw no progress, but this will be a site I visit regularly hopefully they are building engines. These guys use the Ross reduction system.

The Europa people have a really nice web site (WWW.europa-aviation.co.uk) which lists everything you used to pay \$10 - 15 dollars for and now can get it right at the web site. Things like specs, prices, sub-kit info, crating sizes etc. These guys list owners/builders, completion dates first flights etc...

Wana buy an aircraft? Yes even "Trade A Plane" is setting up a site at WWW.trade-a-plane.com It was still under construction when I visited and I could not see anything but it looks like it will launch soon. They list the 1800 number for now.

Some sites are maintained on a daily basis, others on a monthly basis, others are just an info page simply like the ads you see in a magazine. Have fun surfing!

Finally, for those who are as illiterate as I was before I found out my kids were "Surfing the Net" it really isn't scary nor tough to do. The providers I researched can get you on the net for as little as 35 cents per hour. I use a 14k modem and surfed the above sites in about 2.5 hours; not bad for a local call and 87 cents. I use the "Microsoft Internet Explorer" See Ya!

## Proper Engine Break-In by John M. Frank

Few powerplant-related subjects are more controversial than the best procedure for breaking-in a new or freshly-overhauled engine. Ask a dozen A&Ps and you'll get a dozen different recommendations. John Frank explains the principles behind proper break-in, and provides a proven step-by-step technique for achieving good ring seating every time. This article first appeared in the Cessna Pilots Association magazine.

With a new, remanufactured, major overhauled or top overhauled engine utilizing proper break-in procedures is critical to avoiding high oil consumption and its related problems. The main purpose of break-in is to seat the compression rings to the cylinder walls. Let me explain what ring seating is all about.

While a new steel cylinder may look like a smooth surface inside, it really isn't. A stone hone has been used to give the surface microscopic grooves...peaks and valleys so to speak. Each tiny groove acts as the oil reservoir holding oil up to the top level of the groove where it then spreads over the peak surface. The piston ring must travel up and down over this grooved surface, and must "hydroplane" on the oil film retained by the grooves. Otherwise, the ring would make metal-to-metal contact with the cylinder wall and the the cylinder would quickly wear out.

However the ring will only ride on this film of oil if there is sufficient surface area to support the ring on the oil. When the cylinders are freshly honed the peaks are sharp with little surface area. Our goal when seating the rings on new steel cylinders is to flatten out these peaks to give more surface area to support the rings, while leaving the bottom of the groove intact to hold enough oil to keep the surface of the cylinder wet with oil.

Conventional chrome-plated cylinders, generally referred to as "channel chrome", are not honed because they already have tiny channels (or cracks) in the chrome surface created during the electroplating process. However, the same flattening of the peaks must be accomplished. Because chrome is much harder than steel, this seating process can take substantially longer with channel chrome cylinders than with steel ones.

Ceramic-impregnated cylinders such as Cermicrome, Nu-Chrome and Cerminil work a bit differently. The cylinders have a porous surface that retains oil. Only a brief period of time is required during break-in for the piston ring to smooth the surface area to provide sufficient area for the ring to be supported on a film of oil. These cylinders break in very quickly.

You sometimes hear about cylinders becoming "glazed" if break-in isn't done properly. When glazing occurs, oil oxidizes in the tiny grooves or channels

on the cylinder walls, causing the grooves to become plugged with varnish. If the grooves get plugged, they can't do their job of maintaining a consistent oil film on the cylinder walls. The result is usually high oil consumption and blow-by.

As the owner or pilot, you need to do a couple of things to assist this ring seating. First, you should use straight mineral oil during the initial break-in period, because it has less lubricity than normal ashless dispersant oil and therefore provides increased friction to aid in this seating. Second, you should operate the engine at high manifold pressure during the initial break-in period, in order to push the rings out against the walls as hard as possible to aid in the seating.

Try to keep ground runs to an absolute minimum. This is most important with engines that have not been run in a test cell, and will be run for the first time on the aircraft. All factory new and factory remanufactured engines will have been run in the factory test cell for 30 minutes to 2 hours. Some large overhaul shops also give their newly overhauled engines a test-cell run before shipment, but most shops don't. So be sure to ask if your engine was run and for how long.

All ground running should be done with all cowlings and baffles in place. A decowled engine receives very little cooling air, so running without the cowling could damage the new cylinders.

Preparing for the first run. Fill the engine oil sump to rated capacity with straight mineral oil, preferably 40 weight. We find 40 weight is better than 50 weight as the lighter oil will flow a little faster and carry off heat a little better. Dissipating heat is a major concern during break-in. You should use 50 weight oil if the ambient temperature will be above 80F. However, hot weather isn't ideal for break-in.

Remove a spark plug from each cylinder, preferably a bottom plug. Hook the aircraft up to an APU and crank the engine with the starter motor for a period of one minute. This will allow the engine's oil pump to distribute some oil throughout the oil galleys of the engine. If the engine is equipped with a turbocharger, remove the oil discharge line from the turbo and make sure there is oil flowing out of the turbocharger.

If the aircraft is equipped with an electric boost pump use it to pressurize the fuel system to look for leaks. Run the pump on "high" or "emergency" speed with full throttle and mixture at idle cutoff.

First run (30 seconds to 1 minute) Keep this run to minimum time necessary to complete task. Start the engine and run at 1000 RPM or less for approximately 30 seconds to one minute. Immediately after startup, make sure that oil pressure starts rising and goes to the upper part of the green arc. If it stops in low green or lower, shutdown immediately and determine source of problem.

Check that idle RPM is approximately correct (usually about 600 RPM at minimum throttle), that both mags work, and that idle manifold pressure is in the vicinity of 12 inches (if the engine is equipped with a manifold pressure gauge). Check idle mixture at shut down: as you slowly pull the mixture control, you should get a slight RPM rise before the engine quits.

After shutdown, check for oil leaks and make adjustments to anything that is grossly in error. Let the engine cool down completely.

Second run (1 to 2 minutes) Keep this run to minimum time necessary to complete task. Start engine and allow to warm until oil temperature needle comes off of peg. Do normal but brief run-up, checking mag drop. However, do not cycle the prop at all. If the engine is equipped with an electric boost pump, make sure that it will boost pressure, even to the point of starting to flood the engine. If the aircraft has a two-speed boost pump controlled by a throttle switch, it may not be possible to get high boost at idle throttle position, but even low boost should bring up the pressure a bit.

With the throttle pulled back to idle check for correct idle speed -- 600 RPM for most engines but consult your manual in advance to be sure. Slowly pull the mixture out to shut down the engine, there should be about a 25 to 50 RPM rise if the mixture is set correctly. A greater rise indicates to rich an idle mixture, a lower rise or no rise at all indicates too lean an idle mixture.

Shut down and check for leaks, make any indicated adjustments. Let the engine cool down completely.

First flight (30 minutes) Pick a time when you will be able to taxi right to runway and take off. If necessary, make prior arrangements with tower. Start engine, taxi out, do a normal runup but do not cycle prop. If everything appears okay--oil pressure high in the green and oil temperature off of peg--initiate takeoff on longest runway available.

On carbureted aircraft without an engine-driven fuel pump, watch for any indications of mixture problems which may cause a rough-running engine. On aircraft with engine driven fuel pumps (including all fuel injected engines), monitor fuel pressure or fuel flow closely. If too high (way beyond red-line), reduce to red-line with mixture control. If too low (two gallons-per-hour short of red-line or less), abort the takeoff and determine the reason.

Closely monitor RPM. If it doesn't get within 100 RPM of red line and there is sufficient runway available, abort the takeoff. There could be a problem here if the tach calibration is off to the low side, which is where most mechanical tachs are. Some have suggested doing a tach check on the second ground run with a digital tach checker such as the Cardinal tach checker. However, I prefer to avoid getting RPM up in the 2000+ range during the ground runs.

If the aircraft is equipped with a multiple probe EGT and you are able to monitor EGT in addition to the

above-mentioned items, abort the takeoff if any single EGT exceeds 1500 degrees.

Also abort the takeoff if anything sounds, smells, or feels unusual, even if you can't quite "put your finger on it." You should be "spring-loaded" to abort this takeoff, continuing only if everything seems very close to "just right". This is a good rule for all takeoffs, but especially the first takeoff on a new engine!

After takeoff, make a shallow climb and maintain the highest climb airspeed with which you are comfortable. Once you get to a safe altitude, you should make your climb very flat--around 200 to 300 feet-per minute. The goal is to keep as much cooling air flowing over the engine as possible. Circle above airport for 30 minutes (just to be on the safe side). For a normally-aspirated engine, do not get much above pattern altitude so that power output remains high.

On fixed pitch propeller aircraft, keep the RPM at the top of the green. On controllable pitch aircraft keep MP at the top of the green or higher and high RPM as well. If you have cowl flaps, keep them wide open. Use maximum rated continuous power if that can be done without over-tempering the engine; otherwise, reduce power only to the extent necessary to keep cylinder head temperature and oil temperature in the green. Use full rich mixture to help keep CHTs down.

After 30 minutes make normal landing, carrying as much power as possible during approach. Taxi as quickly as prudent to parking and shut down immediately.

Holding this first flight to 30 minutes over the airport just above pattern altitude is a concession to safety. The first flight would be better extending for a couple of hours, but I have been surprised too many times by problems to stay up very long or get very far away from the airport.

Un-cowl and closely inspect the engine for any signs of problems, leaks, cracks, etc. Pay close attention to those things that might have come loose such as clamps and fittings. I have been amazed at how many things can get loosened up after the engine starts providing some vibration. Make adjustments dictated by flight test results. Let cool down completely.

Second flight (1 1/2 to 2 hours) This is a fun one! Take off normally. Stay low and carry as much power as possible, especially MP at very top of green or higher. Use rich mixture to keep CHTs in line. Staying at low altitude is important if the engine is normally-aspirated because this allows for the greatest MP. We have seen problems with break-in at high altitude airports.

For me this flight is great fun because it means I get to whip up and down a gorgeous section of the

California coast at 500 AWL (above water level) with the airplane balls-to-the-wall...an expression, by the way, that originally came from having the ball ends on the early throttles all the way forward towards the firewall.

After two hours, I return to the airport. If there are no problems found and nothing that needs adjustment, I turn the aircraft over to its owner. I instruct the owner to fly the airplane "hard" for the next eight hours, keeping the MP as high as possible and (if normally-aspirated) avoiding any high-altitude flights, preferably staying below 5,000 feet.

Finishing the job How can you tell when an engine is broken in? In the old days, it used to be when the oil consumption stabilized, which is still a good indicator. With today's sophisticated probe-per-cylinder engine analyzers I can often see individual cylinders seat. When the CHT on any cylinder drops about 50 degrees in the space of a few minutes with no change in engine operating conditions, that cylinder has seated. I almost always see Cerrnicrome seat within an hour. Standard nitrided steel cylinders take three to four hours, and channel chrome a couple hours more.

At five hours, change the oil and filter, or clean the screen. Refill the sump with fresh mineral oil. At ten hours, drain the oil again, change the filter or clean the screen, and refill with whatever ashless dispersant oil you are going to use. I recommend Aeroshell 100W unless operating circumstances dictate a multi-weight oil. Give the engine a thorough going-over. Put a torque wrench on every exposed nut and bolt and check torque. I am amazed at how many loose bolts we find. If anything is dramatically loose, do whatever is necessary to check the bolts around the one with loose torque.

Some recommend going on break-in procedure and oil for up to 25 hours. My experience is that if the engine isn't broken in at 10 hours, it just isn't going to happen. The only possible exception is channel chrome jugs which might take slightly longer.

If the engine hasn't broken in after 10 hours, you either have to put up with the high oil consumption, or pull the cylinders, break the glaze with a hone, check the rings for damage and correct material (personally I would install new rings), reinstall the cylinders, and start all over from scratch.

But if you do the right thing during those first critical 2 or 3 hours of break-in, you'll get good ring seating and low oil consumption every time.

John Frank is the Executive Director of the Cessna Pilots Association. He's a 14,000-hour ATP-rated pilot and an A&P mechanic with inspection authorization. He owns a 1967 Cessna T210 that burns hardly any oil.

## EAA Chapter 245 Flies 71 Young Eagles!

by Lars Eif

For the fifth year in a row, EAA Chapter 245 in the Ottawa area introduced a large group of young people to the wonderful world of small aircraft. On June 14, the day internationally acclaimed for the Young Eagles Flight Rally, 71 new Eagles took flight at Carp Airport.

The weather, as usual, played havoc with preparations for the event. It rained the day before and the day after the event. It even rained on our rain date which we fortunately did not have to use. Mercifully, however, June 14th dawned to a beautiful blue sky. But to make sure that we did not get off Scott-free, the weather gods sent us a stiff, turbulent cross wind which sorely tested the skills of the pilots and the stomachs of the Young Eagles. To their credit, our 12 pilots flew a total of 49 missions and every landing was flawless!

The majority of the 71 Young Eagles were members of Ottawa area Scout troops and Cub packs. The kids, parents and leaders were kept well refreshed throughout the day with juice, coffee and cookies. Young Eagles who were waiting to go flying, watched a video tape about flying and received a guided tour through the Chapter hangars led by Reg Leblanc who described each aircraft in detail.

This was the first Flight Rally for EAA Chapter 245 where corporate sponsorship was sought. COPA very kindly provided the Mobile Uicom truck, ably manned by Bob Taylor who kept the aircraft well spaced out so that congestion in the circuit was never a problem. Hammond Aviation Fuels donated 150 liters of avgas which was raffled off. A delighted Mike McGrath, Rod Neufeld and Wolfgang Weichert each won 50 liters of free fuel. Youth Flight Canada also generously supported the Flight Rally.

Rod Neufeld won the honour of taking our sole reporter up for a flight with one of his Young Eagles. The Ottawa Sun printed a very complimentary article about the Flight Rally in their Sunday edition.

Here are the people who made it happen:

**Ground Crew:** Bill Argue, Pauline Dumas, Lars Eif, Curtis Hillier, Tamara Hillier, Rick Jones, Reg Leblanc, Martin Poettcker, Jon Preston-Thomas, Jim Robinson, Allen Robinson, George Skinner, Irving Slone, Eric Taada, and Bob Taylor.

**Pilots:** Gary Palmer with his speedy Lancair; Wally Bielinski and Manfred Ficker in Cessna 172s, Dick Moore and Ken McKenzie in Cessna 150s, Garry Fancy, Mike McGrath and Terry Peters flying Piper Cherokees, Rod Neufeld in his Cheetah, Jim Bradley with his Davis, and Wolfgang Weichert and Graham Armour taking turns flying their gorgeous new RV-6.

## Classifieds

Place your ads by phone with Charles Gregoire  
@ 828-7493  
or e-mail to cbg@nortel.ca  
Deadline is first of the month.  
Ads will run for three months with a renewal  
option of two more months.

**For Sale:**  
Scott Tailwheel 8" Model 3200 from Cessna  
180, Set of Plans for Evans VP-2 (Volsplane)

**Wanted:**  
Continental C90-12F engine with current logs  
for certified aircraft (may accept runout  
engine needing overhaul)  
Lionel Robidoux 613-738-1066 10/97

Zenair CH300TD project, Complete except for  
engine and instruments \$11,000.  
Serge Boucher 836-1476 10/97

Cessna Wheel Pants, modern style with access  
doors to check tire pressure. \$200.00 for a full  
set (i.e. for nose, right and left main wheels)  
Jim Robinson 613-830-4317 09/97

Davis DA2A all metal, TT400hrs, C85-12,  
25hrs SMOH, 110 mph cruise, fast, efficient,  
compact 2 place. \$13,500.00  
Jim Bradley 613-839-5542 05/97

Rotax 277 prop plus reduction gear \$500.00  
Jim Bradley 613-839-5542 05/97

Cozy MK IV Project for sale  
Nigel Field Wk. (8 to 5) ph (819) 956-1416  
Email: fieldn@sos.pwgsc.gc.ca  
Res. Embrun Ont ph (613) 443-5138  
Email: nfield@cyberus.ca  
Owner Mr. Ian Percy  
Embrun Ont ph (613) 443-0581 04/97

### Garry's Parts Bin

Dynafocal engine mount  
Wheel pants \$100.00  
Oil, break-in, 12 litres, Shell, Esso  
Wing Tip Nav Lights  
NACA air inlets  
Elevator trim assembly  
Primer  
Valves, Fuel selector  
Valve, Parking brake  
Accelerometer (G-meter) 2.25 inch  
Oil cooler - Continental 6cyl.  
CHT guage and probe  
Lycoming, Accessory case, dual take-off adapter  
for  
hydraulic and vacuum pumps.  
Spinner, pointed, Cessna  
Piston rings for Continental E-185 or O-470  
  
Control wheel yoke assembly from Piper  
Tomahawk  
  
Engine, VW 1600cc completely rebuilt  
Garry Fancy (613)-836-2829 07/97

For Sale - Pair canopy tracks 45"  
4" venturi, Bendix SF4 magneto, New Zenaire  
wood propeller for 0200, Oil temperature  
gauges 40" & 120", Oil pressure guage 0-  
80psi, Starter drive for C75/C85/C90.  
Lionel Robidoux (613) 738-1066 01/97

### Aircraft Supplies

Small surplus of mil spec airframe wire 18, 20  
22 awg and 18 shielded, the real stuff and  
traceable.  
Dave Stroud 226-7889 06/97

Steel, Aluminum, Plastic, Wood and hardware.  
Available from Grass Roots Aviation, 648 Adelaide  
Ave. West, Oshawa, Ontario.  
Dave Drain (905) 434-4651 06/97

PVC pipe, valves and fittings, Fibreglass -  
Resin, cloth etc., Plastics - tubing, bottles  
and bags.  
29-174 Colonnade Road South, Nepean, Ont.  
228-3295 06/97



Services

Oxygen/Acetylene welding, brazing and silver soldering available from Lionel Robidoux, 195 Crestview Rd., Ottawa (613) 738-1066. 01/97

World of Maps For all your map needs including Aeronautical series. 118 Holland Ave., Ottawa. 724-6776. 01/97

Stittsville Ruber Stamp THE STAMP BARN 1450 Main St., Box 625 STITTSVILLE, ON K2S 1A7 Tel (613) 831-3292 Fax (613) 246-1142 1-800-246-1142 stitstmp@ftn.net http://www.ftn.net/~stitstmp Sharon and Rodney Stead 06/97

Your Ad Here

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: cbg@nortel.ca 07/97



EAA Chapter 245 Membership Application

NEW:\_\_\_ RENEWAL:\_\_\_ DATE:\_\_\_/\_\_\_/\_\_\_
EAA NUMBER:.....
EXP Date:\_\_\_/\_\_\_/\_\_\_
NAME:.....
ADDRESS:.....
CITY/TOWN:.....
PROV:.....PC:.....
PHONE:(.....).....H
(.....).....W
AIRCRAFT &
REGISTRATION:.....

OTHER AVIATION AFFILIATIONS:
COPA:\_\_\_ RAAC:\_\_\_
OTHER:\_\_\_\_\_

Annual Dues: January 1st to December 31st. (porated after March 31st for new members/subscribers). Associate Member \_\_\_: \$30.00 Newsletter plus Chapter facilities Full Member: \_\_\_: \$55.00 Newsletter, hangar, workshop, tiedowns 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, Ontario, K2M 2C3