



NEWSLETTER

Carb Heat

Hot Air and Flying Rumours

Vol 29 No. 10

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November-December 1999

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Next Meeting:

Thursday November 18, 1999 8:00 PM
National Aviation Museum Theatre

Presentation by
Garth Wallace

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The crisp colourful days of fall are slowly but surely giving way to the gray, cold days portending the arrival of winter. Snow has been kept at bay in Ottawa, despite an early dump on our friends in southern Ontario. For those fortunate enough to be flying, performance is excellent, and the habitual crosswinds serve as brisk refresher courses in piloting technique.

October Elections

Our October meeting saw two new volunteers step forward into executive positions. **Pat Floyd** has taken on the mantle of Vice President from Luc De Sadeleer; while **Curtis Hillier** has assumed duties of Secretary from Andy Douma. **George Elliott** continues for another term as Treasurer, and **Charles Gregoire** will continue to serve as News Letter Editor.

On behalf of the membership in general, welcome aboard, and thanks to the outgoing exec members! It is very encouraging to see fresh ideas and enthusiasm being brought to our leadership team.

We also had two additional volunteers; **Lars Eif** and **Jim Robinson** step forward to man a nominating committee for next year's elections. Thanks guys; that is sure to ensure the ongoing health of the chapter.

October Meeting Summary

Our feature speaker Ray Fiset was unable to make the meeting, so we had an impromptu panel discussion on alternate engine activity and interest in the chapter. There is a lot of local interest, with active work on Mazda Rotary conversions, and

Subaru conversions. Interest also extends to the upcoming diesel aircraft engines such as the Delta Hawk.

There was general consensus that auto conversions are slowly starting to prove themselves, particularly with Subaru EA81s in the 90 - 100 HP range, Subaru EJ22s in the 135 - 150 HP range, and Mazda Rotaries in the 160 - 180 HP range.

The key to a successful conversion is careful attention to detail on the **critical systems** including fuel system, ignition, cooling, and propeller speed reduction. For those who are web connected, there is a wealth of information available. Check out the links on our chapter website for more information at <http://eaa245.dhs.org/links/Powerplants.html> **Wayne** has been doing a great job of populating the site.

Oshkosh Pilgrimage-Part 3

The final act in my phase one RV-6 education was the dis-assembly and crating of Luc De Sadeleer's bird, together with Kevin Pearce, the proud new owner.

Kevin had arrived in Ottawa Tuesday evening, a few hours after I had returned from Oshkosh. First thing Wednesday morning, I picked Kevin up at his motel; introduced him to the delights of Tim Hortons coffee and donuts, and set off to Carp to start the disassembly of C-GLUC. The tail feathers were the starting point, and we made good progress, despite a few difficult nuts and bolts. By mid afternoon, we were ready to tackle the wings. The ailerons and flaps were the first to be removed, and we got started on the removal of the 64 plus bolts holding the wing and centre section spars together. Working in the

relatively tight confines of the cockpit was challenging to say the least, and I was glad when Luc arrived later in the evening to spell me for an hour before sunset. A welcome supper and ales left us ready to call it a day.

Thursday saw us complete the removal of the wing, and Kevin spent most of his time building a jig to securely hold the wings for transport. Sunset saw the disassembly complete, as we retired to the Carp pub for a well deserved couple of ales, and Supper.

Friday morning was spent preparing for arrival of the container which was due to be at Carp at noon. When it didn't arrive as scheduled, several phone calls were made to eventually locate it at the International airport. Two hours of intensive work saw the bird firmly secured in its container for shipment to the UK. The trickiest part was hoisting it over four feet via a come-along to get it into the container. With lots of help and a fair share of luck, we just made it, with not an inch to spare.

Thursday Nov. 18th Meeting

Our final meeting of the **millennium** will be held at the Bush Theatre at the National Aviation Museum. Our featured speaker will be **Garth Wallace** a well known aviation author famous for his humorous **Derry Air** columns in the **COPA** newsletter. Garth will have a selection of his books available for sale with him; they make excellent stocking stuffers for your favourite aviation enthusiast. Remember no December meeting! **Gary**

EAA 245's New and Improved Home on the World Wide Web

By Perry Casson

Just like painting your faithful old Luscombe, the job of maintaining the chapter's home web page was one of those chores that we all seemed to find a reason to put off. It's taken a while, but we have finally got around to rolling up our sleeves to cleaning up the place. A few evenings of work with our virtual saws and hammers later, not only had most of the dusty old rooms been renovated but we had packed up moved the whole place on to our own private estate. What's even better is now we own the place, there are no more landlords asking for rent or limits on what we do, we are free to put on additions, knock down walls, drill virtual holes were we wish, it's all ours. In this article I'm going to be your tour guide to show you around our new home, introduce you to what's new, how to use it and why I think using this resource offers some great opportunities to make the chapter an even better place.

Our New Home Address

The first thing to know is where to find our new home on the World Wide Web. Our address is officially written as: <http://eaa245.dhs.org>. To get to it from your favorite web browser simply typing "eaa245.dhs.org" will do. Some of you may wonder why there is no www in our address like most of the web pages you know e.g. www.yahoo.com or www.eaa.org. Well there is a good reason and the short answer is "because we are cheap", but if you want the longer story keep reading I'll tell you about it later.

What's On Our Web Site

Now assuming you were not so excited by the news that we have an updated web page such that you dropped your news letter and ran to your computer to check it out for yourself, let's talk about what's information is up there. So far the web pages created by Barney and Carla deSchneider have been kept pretty well intact, with info on CYRP, Young Eagles, Fly-in Breakfast, Membership, Meetings, Executive e-mail addresses, Newsletter archives and a Links page. Another great big thank-you to them for getting us going. A few links have been added on the home page, such as connections to West Carleton Township, the City of Ottawa, Ottawa weather, downtown traffic and the local news from The Citizen as well as an air photo of the Carp Airport. The Links section has been greatly expanded, we now have over 200 aviation related links listed and sorted into categories covering everything from how to buck rivets to where to buy insurance.

What Could Be Added

Of course a real web site is a living document, it should always be growing and expanding to stay up to date. The most obvious place where we will expand is the Links

section. Please email Wayne Griese (wayner@igs.net) a list of your favorite aviation web sites so they can be added. We are also working on getting some new information up on the web like the information from the EAA Canadian Council, pictures of member's projects and aircraft (we can arrange to get existing photographs scanned or have new digital photos taken). And of course any technical, how-to, historical or training articles you could contribute would be more than welcome.

Your Own Place on the Back Porch

So far I've been talking about you looking at someone else's stuff, but how about turning things around and letting the world see what you are up to? Before I started building my GlaStar I searched the Internet for every last bit of information I could find on home building. I found dozens of web sites ran by homebuilders who were keeping a construction log on their web page. Some of web sites were just simple text diaries and others were very elaborate with hundreds of photos and stories. I've even seen a couple of web pages where over ambitious builders had installed web-cameras and they were broadcasting live from their workshops! The content of these web sites covered every thing from the psychological highs and lows of building your own airplane, to suggestions on how to unload your 2000 lb. shipping crate from the back of an 18 wheeler when the trucking company arrives in your driveway. So when I started building my GlaStar I thought I'd maintain a small web page mostly so my relatives back in Sask. could stop in and check out what this new crazy idea I had looked like. You can check out my project at: <http://eaa245.dhs.org/perry>. Notice the address? My web page is just a sub-directory on our web server, which means anyone else could put his or her web page there as well. In fact once you are set up you can update and maintain you own web site right from your own PC. If you would like to give this a try send me an email and I'll set you up with all the info you'll need including some free software that makes building a web page real simple. My email address is perry@northwoodgeo.com. Last summer Gary Palmer used our web server to post some pictures of Luc's RV6 when they were selling it. Gary sent an email to a couple of internet news lists with some basic "for-sale" information on the airplane and instructions to go to "eaa245.dhs.org/C_GLUC" to go to see some photo's and get more information. Within 2 weeks around 400 people had stopped into the web page to check it out. Being a computer nerd I'd like to be able to say the guy who ended up buying the plane discovered it on the web to demonstrate what a powerful new media this is. But as it turns out the eventual buyer first learned that Luc's RV6 was for sale the old fashioned way at Oshkosh. Oh well, you can't win them all.

Our E-mail List Server

There is a lot more to the Internet than just web pages. One of the most useful things I find on the net are something called "E-mail Lists Servers". An E-mail List Server is simply a computer that keeps a list of email address and anyone who is on this list can send email to this list server and the server then relays this message to all the other members on the list. I belong to about 5 of these lists. An example of one of them is run by the Glastar builders group. On the Glastar list there are about 400 members from all over the world who exchange a steady flow of question and responses about building the worlds greatest kit plane (you wouldn't expect us to be biased would you ;-). I have found it to be a great place to bounce ideas around and hear what problems/solutions other have encountered. So what could we use EAA245's list server for? Well I can think of dozens of things I would have posted there over the last year. How about questions like: "Where in Ottawa can you buy #30 drill bits on a Saturday?" Or "Does anyone have the 1992 Kit Planes article on welding 4130 steel?". Or how about "Who's up for going out for a beer after the meeting next week?"

Joining the EAA245 List server

If you want to join the list simply send an email to: ea245-request@ea245.dhs.org and enter the word "subscribe" as the subject.

That will add your email address to the list of members that will receive messages sent to the list. If at any time you would like to be removed from the list send an email to the same address but change the subject to "unsubscribe".

Sending Messages to List

After you have joined the list you will automatically receive an email that contains a welcome message and a summary of what this list is all about. After that you can email a message to all the other EAA245-ers by simply addressing your email to: ea245@ea245.dhs.org.

Techie Talk

All this great new stuff must have cost us a fortune right? Well... not exactly, ea245.dhs.org is about as unassuming of a piece of computer hardware you'll find. The hardware is a discarded 120 MHz Pentium that would fetch about \$50.00 in the penny saver. It does not even have a monitor hooked up to it. The system just sits on the bottom shelf in the server room at my office humming along drinking about \$2.00 a month of power. The operating system is Linux, it and all the other software we used can be downloaded for free off the net. And what about that strange name "ea245.dhs.org"? Domain Hosting Service (dhs.org) is the name of a volunteer organization that will host domain names for free instead of paying the \$75.00 a year to get something fancy you

could remember like www.eaa245.ca. The total cost for this whole web server was nothing more than a few evenings of work.

This concludes my tour of our new home in cyber space. I hope you all stop in for a visit real soon. Before I go I'd like to give a big thanks to Wayne Griese for all his work in getting this new page up and running.

Remote ELT switch

by Olav Peterson, EAA#33135

It would be nice to know that when the engine balks, God forbid, and you are on your way down, that your ELT is already transmitting your position and announcing your misfortune, and that you don't have to rely on the vagaries of the Inertia Switch.

Having this handy switch on the instrument panel allows for easy verification of the ELT integrity before each flight and it also eliminates false alarm transmissions (see block diagram and schematic at end of article).

The job of installing the two-position toggle switch and a LED with its drive circuitry is simple, and a small bother indeed, compared to the comfort and peace of mind both you and your spouse or passengers will derive from the knowledge that your 'crash site' (ugh!) will be located.

Of course, all is not lost if, in your state of panic, you do overlook to move the toggle switch to ON, because the default position is ARM. The remote switch arrangement does not detract from safety provided by your current installation!

The switch should have a locking lever to prevent inadvertent activation of the alarm either by you or the tiny fingers of your 'air crew', however, the red LED will toggle ON/OFF, at approximately 3Hz rate, when the ELT is active, which assures that unintentional transmissions will not go unobserved.

Regulations require that a label be placed next to the switch with succinct instructions for turning it ON (see end of article for sample).

There are vast differences between ELTs from different manufacturers and which internal function the remote switch enables but it may still be helpful to gain some general understanding if I just briefly ran through the way it works on my Garrett, Rescu 88C, now known as Technisonic, TEL82.

The ELT is turned ON by completing the electrical path between the negative side of its internal, battery-pack, power supply and the transmitter-section circuit ground. It can be done in two ways:

** select ON position of the switch and the path is completed directly;

** select ARM position and the path-to-ground gate is enabled but the completion of the path depends on the state of the inertia switch. A hard impact (heavens forbid!)

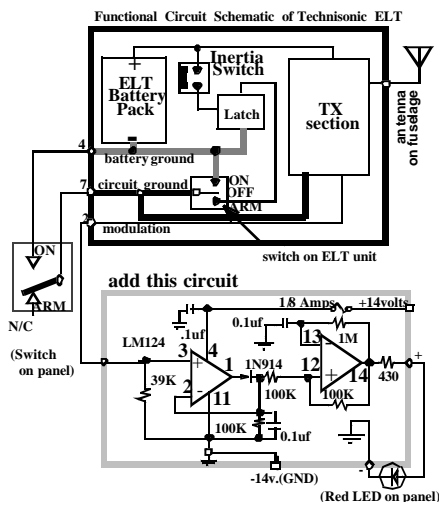
will unlatch the inertia switch and activate the path between the power-supply-ground and the circuit-ground.

The OFF position on the switch of the ELT unit open-circuits the power-supply path to the circuit ground unconditionally.

Hence, the procedure before each flight is to move the toggle switch on the ELT unit from OFF to the ARM position. Of course, it would be a good habit to get into, to verify before, that the remote switch on the panel is also in the ARM position, i.e. not in the ON position.

Also get into a habit of switching the ELT to OFF after each flight !

P.S. I forgot to include one all-important condition for the above to be valid: you have to arrange your crash-landing in an upright configuration because the ELT antenna, normally mounted on the topside, does a very poor job at radiating its alarm message when it's either crushed or shielded by debris of metal fuselage and wings.



WARNING
For Aviation Emergency Use Only
Unauthorized Operation Prohibited
ELT REMOTE OPERATION
ON ---> switch to ON
ARM ---> switch to ARM

Place this label next to toggle switch.

surface mount components on a 1-inch sq.

Humour Section

Submitted by Irving Slone

Newfoundland's worst air disaster occurred today, when a small two seater Cessna plane crashed into a cemetery early this morning in central Newfoundland.

Newfie search and rescue workers have recovered 300 bodies so far; and expect that number to climb as *digging* continues into the night.

Classifieds

Homebuilt glider for sale, Miller Tern C-GWKW.
Wood construction, amateur built in 1978. Aircraft has always been hangared at Pendleton. No accidents.
Total Time 845 hrs. L/D 34:1 \$6500
Juergen Weichert (613) 746-7685
juergen@accolade.ca
More information at <http://accolade.ca/glider> 10/99

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

Charles's Parts Bin

ASA Tri-fold Knee board \$40 obo
New SCAT Hosing, 3" dia. \$8/ft
Old tachometer and cable off C150M \$35 obo
Cessna Clock \$35 obo
Charles Gregoire 613-828-7493 11/98

Tim's Parts Bin

Cessna 140 exhaust system complete \$500.00
Cessna 140 engine baffles \$50.00
MS24566-4B pulley NEW \$8.00ea.,
Large HF radio (ex Otter), good ham project \$25.00,
Large Radar Screen (possible coffee table???) \$25.00,
Beech 18 oil cooler, new (possible rad??) \$50.00, 6 Gal.
J-3 wing Tanks (2) \$200.00, Box of VW engine Parts (possible 1/2 vw project) \$50.00, New autopilot, 12 volt trim servos and stuff \$25.00, Air Path and Pioneer 3 1/8 compass cores \$75.00/ea, Shark Fin pitot tube 24volt, new in box \$25.00, Beaver U/L Lotus float rigging (spreader bars, etc.) \$25.00, Continental prop. spacer (O.E.M. alum) \$50.00
Tim Robinson 613-824-5044 03/98
75714.2136@compuserve.com

McCauley Metal Prop, 70-38 for a continental A65 or C85.

Jim Robinson 613-830-4317 01/98

Garry's Parts Bin

50 ft. 1/8" galvanized aircraft control cable, 7x19, MIL-W83420D
 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, Accesory case, dual take-off adapter for hydraulic and vacuum pumps.
 Piston rings for Continental E-185 or O-470.
 Light weight starter & bracket for Lycoming O320 or O360.
 two Lycoming engine-driven fuel pumps \$50.00 each

Control wheel yoke assembly from Piper Tomahawk

Engine, VW 1600cc completely rebuilt
 Garry Fancy (613)-836-2829 01/98

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@nortelnetworks.com 01/98



EAA Chapter 245 Membership Application

NEW:___ RENEWAL:___ DATE:___/___/___
 EAA NUMBER:.....
 EXP Date:___/___/___
 NAME:.....
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 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