



Carb Heat

NEWSLETTER

Hot Air and Flying Rumours

Vol 27 No. 3

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April 1997

Next Meeting: Thursday 17th March 2000hrs

Bush Theatre

National Aviation Museum

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Mike Busch

(mbusch@avweb.com)

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Guest Speaker:

-Glenn Priestly will talk about issues facing General Aviation and what COPA is doing about it.



RV-6 Wolfgang Weichert

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Winter is very reluctantly loosening its grip on the National Capitol region. While in my last column I predicted mid April as the date the field would be ready for use, it now looks more likely to be late April, possibly month end before terra firma becomes firm enough for traffic. We have placed barriers up to keep cars off the field, please respect them, and park your cars either in the Bradleys lot, or alternatively on our paved entrance-way.

It is also important to notice that the rear road is unusable, even though it appears fine. That was proven Sunday April 6th, when Lars Eif ended up to his axle on a section of road that George Elliott and I had walked just two hours earlier and viewed as remarkably dry. Unfortunately, the beautiful gravel is only skin deep and sitting on quicksand in spots. We have also signed this road as unusable.

Rotary News

Les Staples seems certain to meet the challenge of first fire before the snow is gone. The deed is planned for tomorrow, Monday the 7th, and there are still deep drifts surrounding the row hanger that will take at least 2 more weeks to melt.

Once the initial engine runs are completed, Les plans to focus his energies on the airframe and use that for runs with the reduction drive and prop. So if you haven't seen it yet, don't delay much longer, as it soon will be moving from the test stand to a real airframe.

Firewall Bushings

Some of you may recall that I was experiencing intermittent alternator regulator problems last summer that I had been

unable to isolate. Well I finally found the cause, and it was an intermittent short of the field wire through a worn 3/8" rubber grommet. It seems that the small size doesn't have as thick an inner wall as the larger grommets that handle all of my wires except the two alternator ones. The fix was to machine a nylon bushing and aluminum collar on the lathe, with help from Les. The result is a far superior solution that I would recommend to all. If you check Les's installation you will see some examples. If you do use grommets, be sure to chose the larger, thick inner wall style; don't use hardware store style grommets.

Carp Airport Status

The management confusion at Carp has lessened somewhat with the regional staff proposal that they take over management being soundly rejected by regional council. Despite that positive step, the potential role of the Ottawa International airport operating authority in overseeing or possibly managing Carp is still being investigated. In the meantime, the WCAA's mandate has been extended a couple of months.

On March 26th, I got to celebrate my birthday putting forward our issues with the proposed standard lease to the WCAA board of directors. While prospects at the start of the meeting looked bleak, by the end of our presentation we had made distinct headway on many of the issues. The ball is now in the WCAA court, and we hope to receive a new proposal from them in the near future. I hope my optimism is not misplaced, and we receive a proposal that both parties can live with that represents fair treatment for our chapter.

March highlights

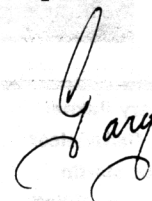
Wolfgang Weichert provided some fascinating video chronicling the building of his RV-6. There was so much good material, that it is impossible for me to precis the presentation; suffice it to say if you missed this one, you missed a good'un. There should be a write-up elsewhere courtesy of Wolfgang himself.

Arrow hero at NAM

If you missed our last meeting, you also missed the opening celebration of the new pushing the envelope display at the museum. Amongst the many honoured guests present, was a personal hero, Mr. **Jan Zurakowski**, the chief test pilot for the Arrow. I have only asked for one person's autograph in my life, and am honoured that Zura acceded to my request. All in all, a very memorable evening.

April 17th Mtg.

Glenn Priestly, from COPA will be our featured speaker. He will update us on the latest round of meetings with **Nav Canada** to review the local airspace screwup last fall. In addition, he will discuss the various user fee proposals being floated by our Nav Canada friends. So if you want to hear the latest, and make your own voice heard, don't miss this unique opportunity. I look forward to seeing you on Thursday April 17th at the **Aviation Museum**, 8:00 PM sharp start.

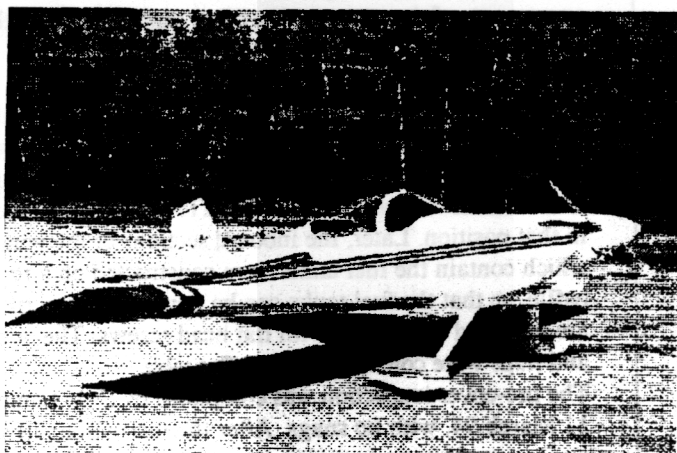


Gary

One builders thoughts and experiences in constructing an RV-6.

Wolfgang Weichert

In 1992 I decided to build an RV-6. In this article I will detail the decision process through which I arrived at choosing this particular design, including choice of construction material, definition of operating envelope, financing aspects, and others. I will also cover the actual construction aspects, make - buy - scrounge decisions along the way, technical support, and test flying.



Choosing the material:

Before building the RV-6, I had several decades of flying experience in both gliders and single engine aircraft. At the time I owned a share in a Citabria 7ECA, with most of my flying experience on that model and on the 7GCBC (towing gliders), the Champ, Maule 4, Katana, and the standard 2- and 4-seat Cessna type aircraft. I had also been exposed to flying aerobatics in Pitts, Steen Skybolt, and Chipmunk, and I hold an aerobatic instructor endorsement on my glider instructor rating.

From previous aircraft building projects, I had experience working with wood and composites, and my original trade education included metal working experience except welding. I had not developed a preference for any fabrication method. In deciding on the building material, we have the choice of wood, composites, tube and fabric, and all-metal construction. There were really only 2 criteria which strongly influenced my decision: Durability in today's environment, which has become harsher over the last 40 years with acid rain and

increased sun radiation; and ease of field repair. I think that all-metal construction (alclad aluminum) satisfies these two criteria the best.

Tube & fabric airplanes, and aircraft build of wood will last a long time if they are hangared, but they will require constant maintenance when stored outside. I think that composite and metal aircraft, well protected at the building stage, will outlast the other materials by a longshot.

When it comes to field repair, metal is not necessarily the easiest to work with, but it can be worked with in any temperature and humidity condition in which a human can be reasonably expected to do any useful work. The same does not hold true for gluing of wood, laying up fiberglass, or replacing fabric. These operations require temperatures of 15 - 25° C, and most structural glass repairs should be done under controlled humidity. I therefore decided on all-metal construction.

Operating envelope:

For the operating envelope I defined four requirements: Cruise speed, take off and landing distances, seating, and category.

Most of my past flying was at cruise speeds of about 100 kts. That is a very acceptable speed to go to the local Sunday morning fly-in, and it will also get me to Oshkosh. But that takes a little long, and coupled with a good headwind it may stretch into a 2-day affair. So a little extra speed would be very useful, say 50% faster, 150 kts or so, I don't want to add too much expense to this project by requiring a very thirsty engine.

Being used to operate from grassfields, and sometimes even small grassfields, a low landing speed would be desirable, but I didn't know exactly how low, so I could not define this too well until I started looking at prospective designs and advertised take off and landing distances; I did not see a requirement to get into fields shorter than 1000'.

I like sharing my flying experience, and that requires at least 2 seats. However, I could count on a single hand the number of occasions on which I needed a 4-seat aircraft. I think 3 seats would be ideal, but there are not many aircraft fitting that profile. Therefore, my criteria would be 2 seats, side by side, a configuration which gives much better contact between pilot and passenger, and which heightens the shared experience.

With my flying background, my preferred category aircraft would be utility or aerobatic, preferably aerobatic. There were already some indications that removal of the aerobatic restriction was to be made easier than in the past.

I never considered retractable vs. fixed gear. The additional weight, expense, complexity and possible failures did not seem to warrant going the extra distance. For similar reasons I excluded the use of constant speed propeller. It adds weight, complexity, and expense.

There are many aircraft designs which were automatically excluded by the above stated requirements. I started looking at 3 designs, the Murphy Rebel, VAN's line of RVs, and Chris Heintz all-metal line of aircraft. All designs other than VAN's were too slow by my criteria. The Rebel, being a tandem seat aircraft with some fabric covering, had three strikes against it, but it certainly has a lot of other redeeming features. The Super Zodiac 601 HDS probably came closest to my defined criteria, but its cruise speed was too low.

However, the possibly low operating costs of running on a Rotax engine was very tempting. My final choice was the RV-6, an all-metal low wing 2 seat side by side aircraft, in tail dragger configuration, with aerobatic capabilities in the sportsman class.

In looking at the various designs and prices, it does not take a mathematician to figure out the final cost of an aircraft. The lowest airframe cost was in the order of \$ 12,500 (VAN's), add to this an engine from \$5,000 up to \$ 30,000 depending on your fancy, instruments at zero cost (depending on what one has accumulated over the years) up to \$ 5,000, VHF radio & nav between \$ 500 (for a handheld Nav/Com) to \$ 6,000 for a Com/GPS and Mode-C transponder, \$ 500 - \$ 1,500 for painting, and up to \$ 3,000 extra if some items such as exhaust system, baffles, cushions and some other items are purchased rather than built. That will total to between \$ 20,000 and \$ 60,000. A number of tools were required which I did not own, such as riveting tools, air drill, compressor, squeezers, dimplers, seamers, fluting pliers, shears and many more, easily adding another \$ 1,000. Transportation charges will add another \$ 500 to \$ 1,000, and the taxman will take an additional \$ 3,000 to nearly \$ 9,000. One can spend well over \$ 70,000 on this project.

Finances:

I needed financial help. I was currently a part-owner of a Citabria in a 5-way split, and this had worked very well over several years. In an owner syndicate one not only shares the original cost of purchasing/building, but also all other fixed expenses such as insurance, hangarage, recurring fees for radio license, equipment certification, etc. I advertised for partners in the local airports, and interested partners were soon found from within the Gatineau Gliding Club. They are Graham Armour, Bob Mercer, and Ken Brewin.

Building the airframe:

At the time of ordering the first airframe kits, the only additional option was to purchase the pre-built wingspar from Phlogisten, a company contracting to VAN's. I did not purchase this option but wanted to build my own spar. The wing kit and empenage kit arrived in June of '92. I started with the construction of the empenage. There were no jigs

required other than a holding fixture which consisted of two vertical 4x4s solidly anchored at top and bottom, and a connecting horizontal 4x4 about 3 feet above floor level. This fixture was designed to hold the empenage skeleton during construction: for the wing construction, the fixture would support the wingspar on outriggers.

The empenage was completed by the end of December, short of riveting the skin. The construction of the wingspars was well under way by mid-december. I used a Canadian Tire airhammer for setting the large 3/16" rivets in the spars with the help of Avery's 20" deep riveting fixture.

The building of wings and control surfaces was straight forward. All that was required was patience, a little concentration, some more patience and plenty of time. The instructions in the construction manual and on the 50 or so 2'x3' drawings were clear and precise so that most builders would have no problem following the procedures. During the construction I never required clarification from VAN's on any aspects of the construction other than how to fix the occasional mistake which I made.

The wings were built with the spar supported flat on horizontal outriggers attached to the holding fixture, the main ribs hanging down, with the rear spar attached to their ends. The outboard nose ribs were drilled and fixed to the spars, and the skin was placed and drilled to the ribs with the wing in that position. Later, the inboard sections of the wings which contain the fuel tanks were constructed on a removable baffle, so that the fuel tanks can be removed at any time. They are mounted to the spar with flat head screws. The aileron and flaps were constructed on a flat table.

The pre-cover inspection was completed by Dale Lamport on 11 March 94, with no snags. After the inspection, all skins were riveted on, and construction of the fuselage started in January 95.

The fuselage requires a ladder type construction jig made up of 2 long horizontal boards on edge, with a 2"x4" cross member at each bulkhead station to support the bulkheads. The fuselage was constructed up-side-down. Firewall and bulkheads were built first and then positioned on the jig, longerons of 3/4x3/4 were bent to shape and fixed in place on the jig, and all other connecting parts were placed and drilled and riveted into place. The skins were drilled and riveted into place and the lower part of the fuselage was removed from the jig before the summer of '95. The upper half of the bulkhead and skin installation, jiggling of the empenage onto the fuselage, and some control installation was completed by the end of August of '95. Up to this time we had worked in the basement of our bungalow in a space of about 25' x 10' plus the use of 2 adjacent areas of about 10' x 10'. Now we required more working space and we transferred the airframe to Pendleton airport for completion.

This completion required another year. We installed the engine and gearlegs, completed final wing attachment, installation of canopy and windshield, seats, cowlings,

baffles, exhaust, instruments, electrical systems, instruments, control systems, painting and many more small related tasks. Throughout the construction, all inside surfaces were etched, alodined and primed using zinc chromate at the beginning, and epoxy primer later on. The outside was treated in the same way.

Final inspection by Dale Lamport was on August 16, 96. The flight permit arrived on Sept. 17, and the first flight was on Sept. 19, 96.

Test flight:

On the day before the first flight, Marcel Belanger from Russel provided me with the chance to fly his RV-6 at Pendleton so that I had some recent RV experience and that I knew what I should expect from our RV.

For the day of the test flight we had a small crew of about 8 at the airport. There was a chase plane with 2 pilots on board, some helpers were positioned at the takeoff point, some halfway along the runway in small trucks equipped with extra fire extinguishers, crowbars, metal cutters, and first aid supplies. Others were positioned at the airport's periphery, within easy reach of the nearest phone. All helpers were equipped with portable radios. As the test pilot, I wore a fire protective suit, leather boots and cotton gloves, crash helmet with headset and boom mic, and a parachute.

The first take off was normal. I quickly tested responsiveness of controls while still over the runway, then climbed at about 90 kts to 500' altitude, gently turned a 180 and continued climbing to 3,000' and later to 5,000' over the airfield. This flight lasted about 40 minutes and included readings of engine vitals, airspeed and climb figures, and airspeeds with approaches to stalls in various configurations. Later that day the aircraft was flown by my partners, and flying continued on the following days.

To this date we have flown close to 100 hours basically troublefree. The aircraft was flown to Portland, Maine soon after the 25 hour restriction was removed, and at the time of this writing the aircraft is in Lakeland at Sun 'n Fun.

Technical support:

When I started this project, technical support was available by phone from 7 - 8 am and 4 - 5 pm PST, and also by fax and snail mail. VAN added e-mail support during the last year of my building. I required VAN's advice on a number of occasions. I remember once punching a hole into the fin spar web when I wanted to dimple a hole. I asked VAN's support how to fix it. On a wing skin, I drilled a line of holes closer than the minimum acceptable edge distance. On VAN's advice, I replaced the skin panel. I learned quickly, and the number of phone calls were soon reduced. During the first 3 years of my building, I found the tech. support to be very good. I think the quality of support was lower during my last

year, probably caused by expansion at VAN's and their additional workload of designing the RV-8, and the redesign of RV-6 kits for production of pre-punched kits.

Time to build:

I did not keep an exact log of time spent on this project. The logs which I did keep suggest that we have spent close to 4,000 hrs to complete this RV-6. VAN's estimate to complete an RV-6 is 1500 to 1800 hrs for a basic airplane without complex avionics, instruments, or interior. Ours is not complex, but we probably have a more complex aircraft than the one used by VAN for his estimate.

Performance:

Our aircraft is equipped with an O-320, 160 hp engine turning a fixed pitch Sensenich propeller. This propeller was designed by Sensenich for the homebuild market, but it is a certified propeller.

With this combination, the aircraft will cruise at 160 kts TAS at 8,000' on 75 % power. It will climb at over 1,000 ft/min at max. T.O. weight of 1700 lb. At a fuel consumption of 8 US gal/hr, the range is 640NM. Take off and landing distances are approximately 600'.

Today's options:

Building an RV-6 has become easier during the last few years, at additional cost. The kit prices have increased by 20%, but builders now get pre-drilled (or punched) skins and ribs in the wing kit and the empennage kit. The firewall is pre-build short of being riveted. There is an option of a quick build kit at a cost of close to \$ 27,000. VAN's carries a wide range of accessories in their catalog at prices well below general market prices.

NOTE: All prices are in Canadian currency converted at the rate of the day.

Reflections:

Building the RV-6 was an enjoyable experience, but more so is flying it. I would repeat the construction all over again. However, next time I would probably build an RV-6A, which is the same aircraft in tricycle configuration. I no longer believe that real airplanes must have a tailwheel. The tricycle configuration allows improved visibility during taxi and take off, and getting in and out of the aircraft is probably easier when the seats are less inclined to the back.

Operating costs:

We have our aircraft insured against ground and inflight incidence. The aircraft is stored in a hangar. This and some other items incur expenses of about \$ 3,400 annually, which are divided between the owners at \$ 850 each. We charge ourselves \$ 40.00 per hour airtime. This covers fuel expenses of \$ 25, \$ 5 for general maintenance, and \$ 10 towards an engine overhaul. At an annual flying of 50 hours, it costs us \$ 57 per hour to fly an aircraft with good cross country performance. This is considerably cheaper than renting an equivalent aircraft, we know our aircraft intimately, and we can use it for going on holidays without guaranteeing a minimum number of flight hours. Sharing the aircraft has worked well. One reason that it works so well could be that all owners are glider pilots who have for many years flown in an environment of sharing equipment. <

The Jug Jungle

This is the 4th and concluding installment of the Jug Jungle.

Whether you're approaching major overhaul or just dealing with one jug with a mid-life crisis, you face a bewildering array of cylinder choices: factory new, oversize, rebarrel, nitrided, through-hardened, channel chrome, Cermicrome, Nu-Chrome, Cermisteel, IFR, Freedom, and now Cerminil and Millennium cylinders... whew! Here is our survival guide for sorting through this maze and choosing replacement cylinders wisely.

This originally appeared in The Aviation Consumer. by Mike Busch (mbusch@avweb.com)

Part 4

Superior's Millennium Cylinders

One of the most exciting cylinder developments is the advent of a second source for new cylinders other than Continental and Lycoming. The new source is Superior Air Parts of Dallas, Texas.

Superior is the largest manufacturer of replacement parts for piston aircraft engines, and holds FAA parts manufacturing authority (PMA) for some 1,700 different parts for Continental and Lycoming engines. Superior parts are widely used by top overhaul shops like Mattituck and RAM, and by all accounts are every bit as good as OEM parts.

Two years ago, Superior introduced its Millennium(TM) brand cylinder for Continental O-200 engines (also approved for O-300, GO-300, and various older A- and C-series

engines). Six months later, they received approval for a Lycoming O-235 cylinder. Recently, Superior started shipping cylinders for parallel-valve Lycoming 320, 360, and 540 engines. Millenniums for big-bore Continental 470 and 520 engines are anticipated by spring of 1995, and a cylinder for the angle-valve Lycoming TIO-540J2BD is also in the works.

We took a close look at the Millennium cylinders, and frankly we were impressed. Superior has not simply duplicated the OEM cylinders--they've made a bunch of nice improvements. The most striking feature of the Millennium cylinders are their head castings. While Continental and Lycoming both use sand- cast heads, Superior employs a technique called "investment casting" that results in a far denser, less porous casting with smoother surfaces, more consistent dimensions, and fewer inclusions (bubbles). In addition, Superior has beefed up various areas of the OEM cylinder head that are historically susceptible to cracking: exhaust ports, valve guide bosses, rocker shaft supports, and injector and sparkplug holes. Intake ports and cooling fins are noticeably smoother than OEM head castings, and that should provide better airflow.

Superior mates these heads with through-hardened steel barrels. These are not as hard as the nitrided barrels that Continental and Lycoming use, so they probably won't wear as well in problem cases. On the other hand, the Millennium barrels can be reground and honed without any of the problems associated with oversizing nitrided jugs. Our natural skepticism leads us to suggest waiting a few years before buying Millenniums for your big-bore Continental or slant- valve Lyc. We're particularly interested in seeing how the through-hardened barrels hold up. But these sure look like damned good jugs. As a bonus, competition should help keep the price of OEM cylinders in line. Good show, Superior!

TCM Cylinders... Engineering or Trial-and-Error?

It's amazing how different Lycoming and Continental are in their engineering approach.

Lycoming is a strong believer in not fixing things that aren't broken. Year after year, Lycoming turns out high-quality engines, and very seldom makes any engineering changes. In contrast, Continental seems to be perpetually tinkering with the design of their engines. Sometimes these changes turn out to be improvements, and sometimes not. In any event, those of us who fly Continental-powered aircraft wind up being the "beta testers" for TCM's tinkering. Take Continental IO-520 and TSIO-520 engines, for example. In the last 20 years, these engines have received larger-diameter crankshafts, heavier cases, VAR-process crankshafts, and several camshaft changes. But the

most interesting changes occurred in the cylinder assemblies of these engines.

Up until the early 1980s, TCM used forged all-aluminum dome-topped pistons, bottom-vented oil control rings, and well-choked nitrided-steel cylinders. Most of us had excellent luck with this combination. But TCM became concerned about the rate of warranty claims due to cylinders with excessive oil consumption, premature ring-step wear, and occasional compression ring breakage. So they started tinkering.

In an attempt to reduce the frequency of these warranty claims, TCM decided to take most of the choke out of their cylinders, and to redesign their piston from the ground up. The new "steel belted" piston was a flat-top piston made of cast (not forged) aluminum with a steel insert to reinforce the top compression ring groove. The purpose of the steel insert was to provide better support for the compression ring, needed because the elimination of cylinder choke caused the ring to flex much more than before. The new piston was first introduced in the 375 hp GTSIO-520 engine, but soon propagated to all 520-series engines.

At about the same time, TCM introduced a new center-vented oil control ring that dramatically reduced oil consumption by metering less oil to the cylinder walls.

But even as the old problems were addressed by these changes, new problems emerged. Engines started developing barrel cracks of a kind that had seldom been seen before. The barrel cracks occurred on the bottom of left-bank cylinders and the top of right-bank cylinders. In some cases, catastrophic separation resulted.

The reason for these barrel cracks became pretty obvious. The new steel-belted piston was much heavier than the old all-aluminum piston. The heavier piston was creating greater stresses in the skirt area, and barrels were cracking as a result.

TCM came out with several versions of beefed-up cylinder barrels, and issued a service letter (which became an AD) calling for repetitive 33-hour inspections of old-style barrels. Unfortunately, the new barrels didn't make the cracks go away.

Ultimately, TCM recontoured the cam-ground area of the piston skirt so that stresses would be spread over a larger area of the barrel. It's starting to look like this change cured the cracking problem. Still, many engine experts believe the heavy steel-belted piston was a big step backwards.

Until recently, old-style all-aluminum pistons were available from ECI, but they have now been discontinued. Several companies (including Superior) are seeking PMA approval for forged aluminum pistons for the 520-series engines.

In the meantime, it's starting to look as if the center-vented oil control ring may have reduced oil consumption too much, at least in higher-horsepower and turbocharged versions of the 520. There have been a rash of premature cylinder wear problems that appear to be due to inadequate barrel lubrication. Lots of brand new Malibu engines lost compression after 400-500 hours, and exhibited the tell-tale "blued" ring-step characteristic of lubrication failure. The same thing happened with brand new IO-550-powered Bonanzas, including some flight school fleets that flew every day. In some cases, TCM quietly and verbally authorized modification of the oil control ring expander spring to permit additional oil film thickness. And they appear to have modified the expander in new production rings (although they didn't announce this or change the part number).

It has become a favorite passtime of aviation magazine writers to bemoan the lack of innovation coming out of Continental and Lycoming. But innovation can be painful when you've been involuntarily appointed as a guinea pig to test it. <>

**1997 EAA Young Eagles International Flight Rally
Saturday, June 14, 1997 at Carp Airport
(Rain Date Saturday, June 21, 1997)**

Preparations for the 1997 Young Eagles Flight Rally are well underway. Our goal again for this year will be to give airplane rides to 50 children between the ages of 8 and 17 inclusive.

Our reputation has spread quickly by word of mouth. We have three local Scout troops signed on for a total of 38 prospective Young Eagles

As Chapter members, you are welcome to nominate eligible youngsters to fill the remaining places on a

first come, first served basis. Call Lars Eif at 837-6680 to make a reservation. 'Just a reminder: Children who have already had a Young Eagle flight are not eligible.

I will have the sign-up sheets out on the table at the April and May meetings for both the pilots and the ground crew volunteers. The jobs are easy and very satisfying, so if you are new to the Chapter, don't be shy. It's a great way to spend a Saturday and a good chance to get to know a lot of Chapter members. As

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usual, we will have a barbecue after the Young Eagles leave at about 3:30 in the afternoon.

For the pilots, thanks to the efforts of Irving Slone, we have it in writing from EAA that, yes, you do have to have liability insurance on one passenger seat in your aircraft to participate in the Young Eagle program.

Last, and certainly not least, I would like to present our Young Eagle pilots and their mission scores. Without these fellows and their aircraft, we, as a Chapter could not contribute to the Young Eagles cause. Well done, Gentlemen!

Lars Eif, Young Eagle Co-ordinator
837-6680

Pilot	Pilot ID	Aircraft	Total Eagles
Stan Acres	5075	Fleet Canuck	1
Wally Bielinski	4456	Cessna 172	18
Jim Bradley	5097	Davis	11
Andy Douma	4870	Davis	1
Keith Davidson	9635	Zenair CH 600	4
Luc Desadeleer	16838	RV-6	8
Garry Fancy	9637	Husky Cuby, Cherokee 140	11
Chris Fauquier	4450	Cessna 172	10
Manfred Ficker	4449	Cessna 172	6
Ted Givens	13458	Dragonfly	2
Ken Mackenzie	4454	Cessna 150	20
Mike McGrath	13489	Cherokee 140	7
Dick Moore	4453	Cessna 150	30
Rod Neufeld	13791	Grumman Cheetah	9
Gary Palmer	6395	Lancair 235	24
Terry Peters	9638	Cherokee 140	6
John Richards	13488	Zenair CH 300	6
Jim Robinson	4451	Cessna 172	5
Irving Slone	13487	Pietenpol	5
Rodney Stead	4452	Cessna 150	13
		EAA Chapter 245 Total	197

◇

1997 Fly-In Breakfast

Barney de Schneider

After a one year break, while we awaited airport improvements, our annual breakfast is again on. We have selected Sunday, August 10th as the date. This follows our pattern of the last few years in that it is on the second Sunday in August. Those of you who are members of COPA may already have seen our ad.

As we are still early in the planning process, I would certainly like to hear from any members who might have some ideas on improvements to the fly-

in. Every year there are more and more of these events and, if we wish to keep people interested in coming to ours, we should try to make it a little bit better every year. Any ideas?

Prior to the commencement of the fly-in season I will be producing a number of quarter-page ads that will be available to members flying to other events. You will be asked to pass out these ads to visitors at other fly-ins. We tried this the first year I organized the fly-in, and found that a number of people came because they had received the personal invitation.

If you have any suggestions or questions, please give me a call at 225-6003 during the evening or at the office at 954-0048. With more than a hundred

members, I know there are any number of good ideas out there - let's hear them!<>

Weather permitting, Norman White from Ultravia will fly a Pelican into Carp for the event. He will also try and encourage some local owners of Pelicans to attend so you can hear from owners as well as the company.

Upcoming Events

Barney de Schneider

In May our meeting will be at 1901 Research Road where Jim Hutchinson will give a tour of the National Transportation Safety Board's facilities. More details to follow

Our June meeting this year will be held at the Chapter hangar on Saturday, June 21st. Ultravia, manufacturers of the Pelican line of aircraft have kindly agreed to provide a presentation that day.

As it stands, Norman will likely show us their latest video (lots of float flying), followed by a presentation about the aircraft, including, of course, a close-up inspection of the real thing.

This should be a very interesting presentation, so mark your calendars now. The meeting will start at 10:00 a.m. and will be finished by lunch time. We will provide further information about Ultravia in our next newsletter.<>

~~~~~ On the Horizon ~~~~~

Date	Day	Time	Event	Location
April 6-12	Week		Sun 'N Fun	Lakeland Floride EAA Fly-in
April 8	Tue	1930hrs	RAA meeting	Kars
April 15	Tue	1930hrs	RAA meeting	Smith's Falls
April 17	Thu	2000hrs	EAA245 meeting	National Aviation Museum, Rockcliffe
April 27	Sun	Day	Safety & Recurrency relocated to Saugee Municipal at Hanover	
May 10-11	Sat Sun		Air Show	Ottawa Airport
May 15	Thu	2000hrs	EAA245 meeting	National Aviation Museum, Rockcliffe
May 25	Sun	A.M.	Fly-in Breakfast	Embrun
May 25	Sun	A.M.	Fly-in Breakfast	Stirling
June 1	Sun	A.M.	Fly-in Breakfast	Smiths Falls
June 1	Sun	noon	IFF Brunch	Upper Canada Golf
June 5	Thu	1930hrs	Embrun Aero Club Mtg.	C. Martel
June 10	Tue	1930hrs	RAA meeting	Kars
June 14	Sat	all day	Young Eagles Fly Day	EAA Hangar Carp Airport
June 15	Sun	Noon	IFF Fly-in	Bearbrook International
June 17	Tue	1930hrs	RAA meeting	Smiths Falls
June 21	Sat	1000hrs	EAA 245 meeting	Carp Airport

Classifieds

8 April 1997

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