



NEWSLETTER

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Stan Acres
RR#E
Kinburn, Ont.
K0A 2H0

Carb Heat

Hot Air and Flying Rumours

MARCH 1988

NEXT MEETING

NRC Bldg.100 Sussex Drive

Fri 18 March 88 at 8 pm

TOPIC AVGAS vs MOGAS and all that.
Refueling safety
Speaker Joe Scoles

5928147

President - Doug Richardson	592-5279
Vice President - Roger Fowler	225-6070
Secretary - Andy Douma	225-1559
Treasurer - Deric Dods	692-6121
Editor - Ted Chambers	749-0268

Hangars - Dave Murray	256-3674
Aircraft Operations - Garry Fancy	836-2829
Special Events - Gord Standing	224-2879
Membership - Rodney Stead	836-1410
Publisher - Dick Moore	836-5554



EAA Chapter 245 February Meeting

Date: Friday 19 February, 1988
Location: NRC Building, 100 Sussex Drive.
Time: 2000hrs.
Attendance: 26 members, 4 guests.

NEWSLETTER

Chapter president, Doug Richardson, introduced the new members present. They were - Brent Spurrell of Kanata who is interested in the Dragonfly. Greg Glazier from CFB Ottawa North who is interested in Aerobatic aircraft perhaps the 10 Dash 200.

Two other new members were Richard Taylor, he has a Taylor Minicoupe kit for sale and Stan Acres the owner of the beautiful Fleet Canuck currently at the other end of the field.

Guests tonight were Randy Randall one of the original Pietenpol group and John Sibbald a pilot in the military.

Notes of interest: Doug has soloed the Zenith after the required dual instruction from Terry Peters. The aircraft performs beautifully with only minor adjustments needed.

Chapter business:

George Ried tabled a letter to be published in the COPA newspaper, that addressed the current EAA-EAAC controversy. The letter is reproduced latter in this issue.

At George's suggestion, Ted Slack came forward and outlined for us the history of EAA and EAAC going back to the early 60's. Ted's talk was interesting and very enlightening. Many questions were asked and it was apparent that there is much confusion about the EAA-EAAC controversy.

Guest Speaker:

Dick Moore introduced Lawrence Russell of Canus Plastics here this evening to enlighten us on fiberglass.

Lawrence is here on a return engagement. Last year he gave a very interesting talk about plastics.

He brought along several handouts available at the store counter that will assist the builder in working with fiberglass. There are many types of cloth and resins available but many fall into the "exotic" category. Canus deals mostly in several weights of fiberglass cloth and two types of resins. Polyester resin is most popular due in large part to its \$27.00 per gallon price tag. The Epoxy resins are priced at about \$110.00 per gallon.

Polyester resin:

Advantages:

- 1- Relatively inexpensive.
- 2- Able to mix the small amount of catalyst required to suit the conditions in which you are working.
- 3- Easy to work with.
- 4- Able to mix pigments into the resin.

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 Vice President - Roger Fowler 225-8070
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 Editor - Ted Chambers 749-0588

Disadvantages:

- 1- Smells bad - penetrates everything.
- 2- The vapours are harmful.
- 3- U/V sensitive use a final pigment coat to stabilize.
- 4- Shelf life is about 6 months.
- 5- Lacks the durability of the Epoxies.

Epoxy resins:

Advantages:

- 1- Excellent adhesion properties to wood or metal.
- 2- Excellent durability.
- 3- Chemically resistant.
- 4- Very little odor.
- 5- U/V stability is greater than that of polyesters.
- 6- Harder surface.
- 7- Shelf life is one to 1 to 1 1/2 years.

Disadvantages:

- 1- Expensive.
- 2- When mixing the catalyst you must be very accurate. Epoxy pumps are available to give you dead accurate mixing.
- 3- Vapours are harmful and you're less aware of them.

In both cases, temperature and humidity must be closely monitored and controlled as these control the setting time of the resins.

Polyesters usually contain wax. By buying unwaxed resin no final sanding is required.

Money can be saved by layering with Epoxy as a base and finish with the polyesters in the sandwich.

NOTE:

Canus currently has several roll ends of lightweight (1 1/2 to 3 oz.) cloth available at excellent prices.

Lawrence was duelly thanked by Doug.

Meeting ajourned 2245hrs.

Submitted by A.G. Douma, Chapter Secretary.

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Anybody interested in this year's election should attend the next general meeting. This will be held at the Citizen's building on the show is a go planned for the 9/10 of July. Please call all the Assoc. days and evenings at the home of John.

E.A.A. 245 - CHAPTER AFFILIATION

E.A.A. 245 was originally incorporated as a chapter of E.A.A. Good relations and co-operation have always been maintained between E.A.A. 245 and E.A.A.C., however, there has never been any formal tie between the two organizations.

Your chapter executive recommends that we maintain our current status of affiliation with E.A.A. This, of course, will require no formal action by the chapter. However, the current conflict between E.A.A. and E.A.A.C. is an important issue for Sport Aviation in Canada. Accordingly, the executive feels that any member of E.A.A. 245 who disagrees with our current affiliation should have an opportunity to put forward a motion that the chapter debate the question.

At our March meeting the chapter will entertain motions from the floor to the effect that the chapter should debate the questions of our affiliation. If no such motions are made or if such a motion is made and defeated in an open vote, the executive will take no further action with regard to our affiliation. If a motion is made and passed in an open vote, the executive will take steps to arrange a more formal debate of this question.

WANTED: FLOATS AND RIGGING for C-170 Primarily interested in the rigging - if you have them or know of their whereabouts call 832-2691 and ask for John VanTuyle.

I need to time my engine but have not got a mag. synchronizer / timing light. If you own one and would not mind helping, call Fenery Beaudoin 748-9720

Anybody interested in this years airshow at Carp should plan to attend the next general meeting on Sunday the 27 March at 3 AM. This will be held at the Citizen building on Baxter. Yes the show is a go planned for the 9/10 of July. For more information call the Assoc. days and evenings at 836-1101 and ask for John.

WHAT'S UP

FEB. is history now and warmer weather is not too far off. The actual flight testing on the Zenith is progressing smoothly and at a faster pace than I had figured on, hour wise at least. After getting the general handling characteristics to more closely resemble that of the store bought planes, I am now doing Airspeed calculations and speed runs. Only at 10,000 feet do I need my gloves on! It was -30° C aloft but super calm and clear. I could see from Pembroke to Cornwall (give or take I'm not sure.) I should have over 17 hours by now and other than the sound of Westair's till it has been great.

On a couple of Sundays we were met with about 120 feet of rock hard snow banks, but on one occasion the newest resident plane owned by Ed Doddson was able to get out with a little help from his snow blower and enjoy the CAVOK weather. It's strange, but all winter long members have driven (or flown) out to see what is going on at the hanger and field. All 'n all we have been able to get right up to the hanger doors thanks to the good job Bradleys have done in keeping the alleyway clear of snow.

Got John VanTuyle out of his ski equipped 170 long enough to talk and the impression I got was that he has become a ski junkie, and is flying North about 130 miles to where the snowmobile tracks end then farther to do some ice fishing with his buddies - often.

Roger Fowler and his Chief have been seen on occasion braving the Carp crosswinds - successfully of course.

The Petersons have also been spotted, checking the tarps on their 172 and giving silent prayers for the return of the $+C^{\circ}$.

The major purchase of the Fall (the generator), has been run monthly to keep the battery charged and the lights excersized and all is in order there. It starts right up and purrs along without a hicup, it is not needed on the sunny days as it is room temperature in the lounge from 10 untill 5. I do all my calc.'s and have lunch in my sock feet!

One last thing. If you move your plane to Carp, or move your tiedown location, please let our Aircraft Operations man GARRY FANCEY know in advance of the movement if at all possible. Garry's phone number is on the cover page of this Newsletter. The Club has asked Garry to do this postion, and it is Club policy for you to inform him of your intentions.

THANKS to those who have told me of the where abouts of some tool crib tools. The list is still small but with help it will grow. interesting 3rd catagory has been proposed by a member present at the last meeting, one which is used successfully in other chapters. (3) Tools that can be lent out to other members, but stay at the owners home. Tools are always around, this concert just catalogues them so that usually one-call to the crib manager will get you a name or two with the tools that you need - no need to hunt down someone and spend many hours/weeks looking.

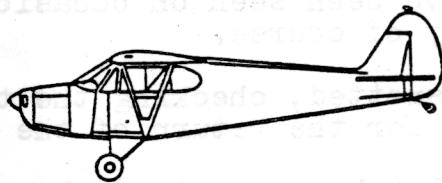
Two other things, don't wait to be asked to help submit some material and/or pictures for the artical the Petersons are going to write on us. Motivate yourself if we all spent even 10 minutes a night for half a week writting what we know about, the job for them would be much easier and enjoyable, please pitch in. If you have your 3D pictures of the plane's ready bring them in to the March meeting.

Flight Lines

by Nina and Olav Peterson. March, 1988.

By mid-February the aircraft in the Chapter tie-down area were standing surrounded by drifted formations of white snow. A few patches of the field had been cleared and a snow-blower was perched on a pick-up truck. The afternoon sunshine created a dazzle of brightness with light reflecting off the snow as well as the predominantly white airplanes. This was Winterlude week in Ottawa and Carp field was looking appropriately festive.

A new arrival at our field is a beautifully reconditioned PA 12, C-GBGQ. This vintage Piper aircraft in an off-white and red paint scheme belongs to Ed Dodson and his son Jim and was one of the brave "snowbirds" we saw airborne after the 30 cm snow fall in February. Welcome to Carp Field!



News from homebuilders across Canada:

The December, 1987 issue of "The Logsheet" from Windsor, Ont., details Bob Wols's efforts to build a Steen Skybolt. A ten year time period between 1975 when the plans were bought and 1985 when the Skybolt first flew was dedicated to the completion of this relatively labor-intensive aircraft. Even the spare bedroom of the house was occupied by the assembly of the lower wing panels. Patient hours were devoted to the pleasant tasks as well as the frustrating ones. While ribs were a delight to build, with four hours for each of the 48 ribs, the mounting brackets and wire attaching plates presented a more difficult problem and were cut from chromoly plate with a hacksaw. The first flight of Skybolt C-GIHR was on Labour Day weekend, 1985, and judging by the fact that it has also participated in an airshow, it is probably quite a performer.

The October "Newsletter" from Toronto describes Nick Bruzzese's ongoing project to rescue a wrecked Jr. Ace whose collision with a tree in a cornfield necessitated some fairly extensive reconstruction work. In three years a new front end, a new fuel tank and numerous wing ribs have been built. Next on the agenda is the sandblasting of the frame

and then perhaps there will be time to look at the possibility of reconditioning the Continental 75 engine.

* * *

"And a wing is an odd thing", wrote Wolfgang Langewiesche in the beginning of his by, now classic, "Stick and Rudder", first published in 1944 and still in print today. That statement was as valid during the forties as it is in 1988 and came to mind recently when reading an article in Canadian Flight on tandem (or, canard), diamond, joined and Warren wings. These most unorthodox wing designs, often involving rearward or forward stagger, are of interest today in connection with modern lightweight materials and are being explored for structural economy, stiffness and crashworthiness. The article is well illustrated with diagrams of six different wing configurations, including a variant of Rutan's Varieze, and a photograph of the Ligeti Stratos, a negative stagger constant gap joined wing, displayed at Oshkosh in 1987. Designs such as these seem to give bodily meaning to the word 'experimental' and are an essential ingredient in the progress of aviation. (Canadian Flight, January/February, 1988, p.16)

For those who are planning a visit to the U.S. one of the more urgent questions may be: "Can I fly my homebuilt south of the border?" The one-year trial program to allow Canadian-registered amateur-built aircraft to fly in U.S. airspace has been extended by the FAA under the provisions of FAR 91.28. FAA is also giving consideration to a Transport Canada proposal, which was initiated by Canadian amateur-builders, to extend reciprocal operating privileges for amateur-built aircraft between the two countries. (Canadian Homebuilt Aircraft News, Feb. 1988, p.1)

How essential is a Mode C transponder? The volume of traffic at Carp, Russel or Arnprior is slight and does not relate significantly to the great emphasis in current aviation literature on Mode C altimeter-encoding transponders. When entering the Ottawa Control Zone we are usually radar identified via our transponder, but rarely have any conflicting traffic. The circumstances were very different, however, when we transited the Detroit Control Zone on our return flight from Oshkosh last summer. The radio was in constant use with the controllers checking and rechecking our altitude and rerouting us to new vectors. Our passage would probably have been more relaxed if we had had a Mode C transponder on board. An expensive undertaking? Well, not entirely prohibiting if you already own a transponder. According to an article in Canadian Flight, the addition of Mode C capability to an existing transponder might cost between \$600-\$900 US. (Canadian Flight, Nov./Dec. 1987, p.11) In an article in "Flying" FAA Administrator McArtor quoted the cost of \$400-\$600 US for such equipment. (Flying, Feb.

1988, p.48). The latter article is further interesting in that it mentions the possibility of assured VFR routes through all TCAs. An even lower price of \$299 US for Mode C equipment is listed in the February 1988 issue of Sport Aviation, p.11, which may indicate a lowering price trend.

An AVR takes to the air.

Referred to as the first real air recreational vehicle, or AVR, is the Moni, which was designed by John Monnett and made its first flight on November 1987, two years after construction was begun. Ian Coristine describes his flight in the all-aluminum plane powered by a two-stroke 30 hp Komet flying Motor (KFM) and especially notes its quick responsiveness, light controls and sensitivity. (Canadian Homebuilt Aircraft News, Feb. 1988, p.5)

Among the many useful new products or devices was the following:

A portable battery-powered borescope, called the Lenox Autoscope, which is an accurate diagnostic tool for the inspection of aging or ailing components. Economical as well as efficient, it costs approximately one third of the standard borescope and would be a worth-while item for an EAA tool-crib. (Canadian Homebuilt Aircraft News, Feb. 1988, p.10).

How good is the field of vision from your cockpit window?

The installation of rearward visual scan equipment which offers the pilot a visibility of almost 360 degrees in his low-wing aircraft is described in Sport Aviation, Feb. 1988, p.94. It involves a truck convex mirror cut down to fit and a soft-tempered aluminum bracket made to hold it.

* * *

Now, for some positive statistics (to which all of us who fly contribute) about general aviation:

Did you know that 99.999998% of all general aviation departures do not result in a fatality or serious injury to individuals in a building or residence on the ground? (Canadian Flight, Jan./Feb. 1988, p. 13)

Perhaps not enough has been written about the consistent decrease in the fatal accident rate in general aviation. Public opinion which is easily swayed by headlines involving plane crashes often unjustly associates aviation with danger. An excellent graph showing the decline rate of fatal accidents over a 42 year period shows a gradual and substantial drop from 7.0 per 100,000 flight hours in 1946 to 1.53 in 1986. (Canadian Flight, Nov./Dec. 1987, p. 12)