Best Wishes for Christmas and the New Year

N E W S L E T T E R

EAA Chapter 245

Experimental Aircraft Association of Canada

Ottawa December 1981

President	J. Keith Gillespie	592-4742
Vice President	Ray Perkins	722-4343
Secretary	Laurent Ruel	820-7017
Treasurer	Barney de Schneider	523-9526
Newsletter	Bill Laundry	523-6791 (home)
		998-3121 (work)

Meetings - 3rd Friday at the National Research Council, 100 Sussex Drive, 8 pm

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(Opinions expressed in this newsletter are those of the contributors and not necessarily those of the Experimental Aircraft Association of Canada.)

N YEAR*****MERRY CHRISTMAS AND A HAPPY NEW YEAR*****MERRY CHRISTMAS AND A HAPPY NEW YEAR*****MERRY

LATE NEWS - GOOD NEWS from Red Morris in letter dated 24 Nov. 1981

Hello to All my Friends in Chapter 245.

God bless you for your card offering Get Well wishes.

In fact, I got well too quickly; I was just getting to enjoy the TLC when the nurses thought it was time to get rid of me. They were all beautiful, and I was getting my exercise just trying to figure out which one to catch.

However, the operation was a success, and the recuperation is proceeding swimmingly. Unfortunately, the DOT seem to think my licence should be lifted for one year. With the prototype Cricket nearing completion at the Zenair plant, I can't wait for one year so you know I have my work cut out just trying to change the DOT decision. Oh well, a good tussle just keeps you young.

God bless you all, and I'll see you in the New Year.

Red

(Ed: Red Morris was EAAChapter 245 President in 1974.)

PRESIDENT'S CORNER

In my last "Corner", I made mention of two of our executive who have passed their office reins along to others. What I failed to do, however, was to advise that a third member of the team has also done so. My apologies to Roger Fowler who, as Editor of our monthly newsletter, has relinquished this task to Bill Laundry, Many thanks, Roger, for a first class job on the newsletter over the past two years.

I must say I was highly encouraged by the response of the members at our last meeting who very quickly split up the computer listing of old interested people and will be contacting the prodicals by phone with the hope of reviving their interest in the Chapter. I don't believe the quest for members can be overemphasised so I urge all of you once again to "beat the bushes" and see if we can't meet or exceed our objective of doubling our numbers over the next year.

Another encouragement came from the program arena where Frank Cianfaglione and John Bell-Walker have agreed to share the load, and will be offering a 50-50 mix of construction and technical items over the winter months. I for one look forward to these programs, and I am certain we won't be disappointed.

We will be scouring the neighbourhood for useable items of furniture for the hangar lounge in the next few months so don't throw out that chair, lamp, table, bookshelf, chesterfield or what have you - it will find a good home at Carp. It has been suggested that we have a "moving" day when all items being donated can be delivered to Carp. Please watch the newsletter for more details.

Finally, since we will not meet in December, (the next meeting will be on January 22, 1982) may I extend best wishes to all for a very happy and safe holiday season, and all good things for the new year.

See you next year.

Keith

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Aviation Consumer, October 1, 1981

Lucky Shot

After getting the encouraging report (Sept. 15 News in the Air) on the PAT-1 aircraft that was the brainchild of the late Howard "Pug" Piper, we are curious about the reaction of the Wichita/Lock Haven crowd. After making do for years with the same uninspired aluminum/rivet technology, will they feel grudging admiration for the stylish composite canard? Was it merely a lucky shot that the aircraft looks so good and flies so fast after so short a design and assembly gestation period?

With composite "kit" planes of great efficiency and dazzling good looks and speed outselling conventional trainers, could there be a message here someplace for conventional plane builders in a languishing market?

There's still a face-saving excuse, however. The task of certificating a composite canard will be much too formidable. Besides, why bother when all those jets and turboprops are selling like hotcakes?

November 10,1981

Mr. Ted Slack,
Executive Director,
EAAC Technical Committee,
104 - 1801 Riverside Dr.,
Ottawa, Ontario.
K1G OE7

Dear Ted:

As you may have already heard, I have been "volunteered" to fill the role as President of EAA Chapter #245 Ottawa for the next couple of years.

Being a fairly recent member of the Chapter and relatively new to homebuilding, this appointment has prompted some updating research on my part into the overall background and raison d'etre of our Chapter and of EAAC generally.

All of this has lead me to the conclusion that EAAC as presently constituted indeed has some problems. But more specifically, the Technical Committee, which is the most visibly productive entity of EAAC and , in my view, certainly a vitally essential component, has only become so through your personal efforts and expense -both of which have limits.

Ted, the real reason for this letter is to assure you that our Chapter recognizes the very real need for the Tech Committee and values highly its accomplishments to date. In short, we want to see it not only continue but flourish. I am very pleased, therefore, on behalf of the Chapter and its membership, to offer our full co-operation and assistance to your Committee in whatever capacity you may feel is required in order to further its aims and aspirations.

Please do not hesitace to call on us at any time and I'll certainly do my best to provide the helping hands.

Yours sincerely,

Keith

J.Keith Gillespie
President EAA # 245
Ottawa.

Tel: Home: 592-4742
Office: 731-3111 (556)

EAA CHAPTER 245 MEETING ON 20 NOVEMBER 1981

- Attendance about 45 with 6 visitors.
- Keith Gillespie announced that as the result of a discussion at the last Executive meeting, he has offered Ted Slack and the EAAC Technical Committee whatever assistance the Chapter can provide. Most of us know that we might not be able to fly our homebuilt aircraft were it not for people like Ted; certainly, the Chapter clubhouse/hangar would probably not exist had it not been for Ted's tremendous effort.
- Keith pointed out that a special fund box will be present at future meetings, until spring, for the purpose of buying insulation and sheetrock for the clubhouse. Any donations will be appreciated.
- Eric Taada announced that the hangar and clubhouse have been prepared for the winter. Alan Wood purchased the leftover siding (at our costs). Irving Slone was instrumental in the Chapter acquiring about 1000 square feet of 2-inch thick insulation for the hangar. Irving also came up with another thousand feet of half inch steel cable for tiedowns.
- John Bell-Walker will look into the regulations for Ultralight aircraft.
- Keith Gillespie suggested that a list of aircraft plans owned by the Chapter members be established. It would be very useful for members to have a look at the plans for a particular aircraft before buying the plans. Some plans are very poor; an experienced builder would have difficulty with them.

Laurent Ruel

NOTES ON TALK BY RAY PERKINS

Ray Perkins gave a very interesting talk on constructing a Mitchell Wing B-10 powered glider. Ray and Greg Heppenstall built the B-10 in seven months from a kit.

Ray and Greg chose the B-10 because they found that most of their flying was on short trips of less than 50 miles - the range of the B-10.

The B-10 is economical to operate (approx. 1 gal/hr), has a good glide ratio (14:1), well established wood/fabric construction, good visibility, trailerable, well proven design, docile handling, good for winter flying with skis, and lands at 25 mph in under 250 feet.

Ray and Greg's B-10 uses a Rotax snowmobile engine rated for 20-22 HP. A direct drive to the propeller is used. Although a shorter propeller must be used, there is no reduction drive weight, and less propeller drag when gliding. (Reduction drives cost about $300.)

Ray strongly recommends buying a new engine; used engines are usually unreliable - often abused.

Ray found that the skill level required for the construction is low and no special tools are required.

Ray and Greg have flown the B-10 and reported on the flying characteristics. Adverse yaw was unexpected and took some effort to control. The B-10 flies at a higher angle of attack than a conventional aircraft; Ray flew his first circuit with full forward stick.

For the prospective builder, Ray suggests using lighter fabric and the newer, lighter landing gear with the big wheels.

Ray and Greg are in electronics and built a "fancy" instrument panel which was the "show" part of the talk. By next summer they should have an encoding altimeter, transponder, dual NAV/COMs and RNAV.

Those of us who have seen Ray and Greg's Mitchell Wing can attest to the excellent workmanship.

Laurent Ruel

EAA CANADA REPORT by George Opacic, EAA Chapter 65, Hamilton

On October 3rd and 4th, the 1981 EAA Canada Annual General Meeting was held in Toronto. Chapter 65 was represented by Ray Bryk, Harmen Koffeman, and George Opacic.

This will likely be remembered as a pivotal meeting in the history of homebuilding in Canada. A great deal of effort had been put into preparing reports and proposals by many of the attending members.

The reason much work was done for this meeting was quite simple. Membership in EAAC had decreased to the point where Transport Canada was now saying to the EAAC Technical Committee, "We realize that you are the best possible people in the homebuilding movement to talk to, but just who do you officially represent?

The apathy and misunderstanding of John Homebuilder was such that only 15% of those people in Canada who are EAA members have continued to support EAA Canada and the Tech Committee. Fifteen percent just doesn't do it, folks.

Transport Canada has been content to consult the Tech Committee on all matters pertaining to amateur-built aircraft. In fact, they have asked Ted Slack and company to take on work that the government would have done in the past. They openly admit that the expertise available on the Tech Committee surpasses what they have in government.

But they can only continue to consult EAAC if EAAC is the proper representative group. Fifteen percent just doesn't do it!

So, you say, why should I support EAAC when they didn't cough up the four magazines that they promised a year ago?

Forgive me for saying this, John Homebuilder, but that shows a very short-sighted understanding of what our national association does on behalf of its members.

The number one, top, A-rated priority of EAAC is, to quote from one of the reports presented at the annual meeting, "to provide strong and continued representation before the various departments of Transport Canada, ensuring that the regulations which govern our building and flying of aircraft are at the same time safe and not unnecessarily restrictive".

In other words, the funds and support that EAAC acquires through its members first go to ensuring that the Tech Committee can perform its role uninterruptedly, on our behalf in Ottawa. If any money or time is left over after this, the other functions of EAAC can be fulfilled; such things as the education of our homebuilders and pilots, contact with members through newsletters, and support of the chapters through various programs.

From this, perhaps it becomes a little more understandable why you haven't heard officially from EAA Canada for the past year or so. A vicious circle developed wherein the support of the membership disappeared. The meager funds available were needed to continue the Tech Committee's work. There wasn't enough left over to publish the glossy issues of Canadian Sport Aviation News, and, by the time the smoke cleared, there wasn't even enough for a black-and-white issue, until this summer, that is, and then the postal strike stepped in.

No, John Homebuilder, you didn't get your magazine. What you did get was a very active time on the part of Ted Slack and the Tech Committee, on your behalf. (The committee is, by the way, well over two grand in the hole, of their own money, because there were things like the Brampton inquest to attend to whether you felt like paying for it or not!)

Although the Tech Committee will gratefully accept donations, they are in need of two things: operating capital from EAAC's funds, and a reasonable level of membership support, in the form of numbers, to show to Transport Canada.

At the 1981 EAA Canada annual meeting, a massive reorganization of the association's structure was approved and initiated. It means that committees are being formed around the country to take over the various duties that the

executive formerly did on their own. The committees will be overseen in their work by designated people on the Board of Directors. Ted Slack has agreed to accept the title of Executive Director and will be chairman of the Tech Committee as well as the new Designee Committee. Full details of the reorganization are being mailed to each chapter.

Those attending the annual meeting left on Sunday with a feeling of excitement for the new path to be taken. But the work to be accomplished needs to start with one thing. Your support!

Please send your membership fee in now, at the same old price, to be paid up for the balance of this year and for 1982. Memberships will be on a January-to-January basis beginning next year.

E A A C M E M B E R S H I P I S : $20.00

EAA Canada, P. O. Box 94248, Richmond, B. C. V6Y 2A6

G. Opacic

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FROM THE EDITOR'S TYPEWRITER - I had a phone call the other day from a friend and fellow EAA member in Hamilton. He called to enquire about the EAAC Technical Committee and how to help financially. It seems that there are several enthusiasts in Hamilton who would like to help out the Technical Committee and wanted to find out if donations could be sent; they weren't interested in joining EAAC. I informed my friend that donations would be gladly received but these monies would be used for capital equipment, for example, chairs, desks, typewriters, copiers, etc. and not for the day-to-day operations, such as, stamps, pencils, paper, rent, telephone, etc.. I pointed out that all the operating expense money must come from EAAC Headquarters and that a donation to EAAC HQ directed to the Technical Committee might work. I also pointed out that all the donations in the world will not help in the EAAC Technical Committee's association with the DOT; here a body count of association members is the only factor. Without EAAC members, the Technical Committee becomes an individual in the eyes of the DOT. The best way to help the Technical Committee is to join EAAC, this gets them the body count and the operations money, and send the rest as a donation to the Technical Committee for capital equipment. A thousand new members in the association is worth a lot more than $10,000 in the bank.

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NEW MEMBERS - The Chapter extends a warm welcome to the following new members:

Dr Douglas G Dale,	R R 2,	North Gower,	K0A 2T0,	489-3111
A G Douma,	42 Beaver Ridge,	Nepean	K2E 6E7,	225-1559
Dr Wm G Drennan,	3-1900 Marquis Ave,	Gloucester,	K1J 8J2,	744-2337
Ralph W McWhinnie,	95 Woodfield Drive,	Nepean,	K2G 0A1,	225-4145

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NEXT MEETING - (NO December Meeting) First meeting in the New Year on the 22nd of January 1982 (the 4th Friday). John Martin will give a talk on aircraft stability and control for homebuilt aircraft.

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FOR SALE

- HARTZELL Constant Speed Propeller for 100 to 160 HP engine
- GRIMES Strobe Light with Integral Power Supply
- Rotating Beacon: Piper PA-28 Type
- Deerhorn NAV/COM Antenna Fiberglass

Contact: Richard Robert 995-3201 (days)

CHAPTER NEWSLETTER REVIEW

EAA CHAPTER 65 Hamilton, Ontario
Crosswinds October 1981
- The chapter newsletter not only contains information on homebuilt aircraft, now we get information on homebuilt bread. Helen Bittner has Rosemary Marzac's recipe for Zucchini Bread. This is getting to be a habit; in the September newsletter, Helen had a recipe for Bran Muffins or Bran Bread. Instead of worrying about whether your plane will rise off the runway, now you may be concerned about the muffins rising in the oven. We must remember that baking was the original form of composite construction. I hope that the EAA Cook-Book will be updated to include these recipes.
- Ray Bryk has a review of the events that took place at the EAAC Annual General Meeting in Toronto on October 3 and 4. For those interested and would like more details, read Ray's review.
- George Opacic of Hamilton, author of the ORGANIZATION & RESPONSIBILITY report for EAAC, has an article on the EAAC AGM. George states that the number one, top, A-rated priority of EAAC is, "to provide strong and continued representation before the various departments of Transport Canada, ensuring that the regulations which govern our building and flying of aircraft are at the same time safe and not unnecessarily restrictive". (The full text of this article can be found on page 5 of this newsletter).

Ottawa Citizen
U.S. 20 Nov. 81

Experimental plane kills 3

HAMPTON, Va. (UPI) — An experimental airplane being tested at the NASA-Langley Research Centre crashed into the Chesapeake Bay Thursday, killing three men who designed and built the plane.

The single-engine, four-passenger prototype general aviation aircraft, designed and built by Piper Advanced Technologies Inc. of Wichita, Kan., crashed about 11:25 a.m. near the mouth of the Potomac River, the Coast Guard said.

Dennis Harns, who built the fiberglass plane last year for Piper, said NASA "was co-operating with us in an attempt to optimize performance." Harns said it had been licensed, tested and approved by the Federal Aviation Administration.

The cause of the crash was unknown.

EAA CHAPTER 305 Dartmouth, N.S. October 1981 - Your reviewer was deeply grieved to hear that Harold Hodgson, 305 President, is resigning because of a feeling of lossing touch with the members and activities of the chapter. Harold has been on the Chapter Board of Directors in one capacity or another since the chapter was chartered in 1966. It is sad to see one who has devoted so much time and effort having to disassociate himself from an organization and as Harold states, it is a feeling of depression, not anger. All Chapters in Canada will feel the loss, not just 305. After having been involved with Chapter newsletter reviewing, this reviewer associates names with chapters and for 305 it's Harold, Wally and Debi to name a few, so the loss of Harold's name will take some getting used to.

EAA CHAPTER 185 Windsor, Ontario Log Sheet November 1981 - George Mann has accepted the position of Chapter Designee. I believe that George is the first Chapter Designee since Rev. Paul Beneteau left the Windsor area for Sarnia. As the newsletter states, "George Mann is your man".

EAA CHAPTER 56 Sudbury, Ontario Northern Wings Inc. November 1981 - Chapter 245 notes that the Sudbury Chapter now has a permanent address. This came about when Sandy Maitland resigned as Chapter Secretary to devote full time to her studies. Chapter 245 has had a permanent mailing address for some time now and most Chapters use it but some don't. Because some of the mail goes to past and sometimes past-past Presidents, we in 245 cannot keep abreast of the goings on out there. Our postal system is a factor in the speed of delivery, so let's try and reduce all other factors in our control and one way is to use a permanent address.

MISLEADING STATEMENT(S) OF THE MONTH - In the November issue of AOPA PILOT, there is an interesting series of three articles about "Lift Management". I say interesting because one of this reviewers pet subjects is the "Angle of Attack Indicator" and these articles deal with this and a related device. But all three articles contain some fundamental errors.

*****"The fact that an airplane stalls at relatively high airspeeds in turning flight - the accelerated stall - receives special attention."

The airplane in turning flight is not in an accelerated condition, that is, it is in steady level flight at constant airspeed and constant angle of attack. The stall speed is high because the vertical component of lift must be equal to the aircraft weight. In the accelerated stall condition, the stalling speed is less, not greater, than the unaccelerated stalling speed.

*****"Excluding lack of proficiency or panic, we would have to say that the pilot lacks a reliable means of knowing precisely the airplane's pitch attitude or surplus of lift relative to the stall."

The airplane's pitch attitude relative to the horizon or the flight path? This is very important since the angle of attack is relative to the flight path and not what you see out the window or on the gyro horizon. There cannot be a surplus of lift in steady flight, the vertical component of lift must always equal weight. The word "lift" should be replaced by "lift coefficient" which is a function of the angle of attack.

*****"An area of low pressure, called the stagnation point, forms where the separation occurs."

The stagnation point is neither a point of low pressure nor high pressure. It is a point where the pressure is equal to the atmospheric pressure; that's why its called "stagnation" pressure.

*****"This informs the pilot that he must increase the airplane's airspeed by adding power and/or adjusting attitude in order to prevent a stall."

*****"The surplus of lift has vanished; and, unless power is applied, the airplane will continue its mushing, partially stalled descent."

*****"Get too slow, and you must add power, lower the nose or both."

What in heaven's name has power got to do with angle of attack? The only way you can get away from the near stall condition is to reduce the angle of attack and the only way you can reduce the angle of attack is by lowering the nose. Adding power at high angles of attack will reduce the sink rate but it will also reduce the stalling speed and give you a feeling that all is well. If you stall now it's going to be a wild ride if your not expecting it. Always remember that the only thing that controls airspeed is angle of attack and the only thing that controls angle of attack is the elevator or the pitch control. Once you've set your speed with the stick, set your rate of climb with the throttle. If you're experienced, you do both at the same time.

EAA CHAPTER 41 Toronto, Ontario November 1981 - Red Morris is in the Toronto Western Hospital for a serious eye operation. All of us in Chapter 245 wish him a speedy recovery and a quick return to the red-white-blue Tri-Z.

EAA CHAPTER 318 Calgary, Alberta October 1981 - I see that George LeMay, Chapter President, has been elected as First Vice President of the Alberta Aviation Council. What is the AAC's gain is the Chapter's loss since George will not be standing for re-election as 318 President.

EAA CHAPTER 85 Vancouver, B.C. Turn and Bank November 1981

- "FORMING A CANOPY": This is the title of Kevin Maher's article in the newsletter on his method of forming a canopy for his Fly-Baby.
- President Elect for Chapter 85 is Art Ott.