

EAA 245

OTTAWA, ONTARIO

# NEWSLETTER

REPLY TO: EAA CHAPTER 245, TERMINAL BOX 8412  
OTTAWA, ONTARIO  
K1G 3H8



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CARB HEAT - Hot Air and Flying Rumours

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

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## APRIL 87

April 24th (as in the forth Friday of the month)

Capt Clive Barratt  
Director of flight safety  
will present a talk on Flight Safety  
(film and video)

### EAA CHAPTER 245 (Ottawa) MARCH MEETING

DATE: Friday 20 March 1987

LOCATION: Room 3001, NRC Building, 100 Sussex Drive.

ATTENDANCE: 36

TIME: 2000HRS

Chapter president Eric Taada dropped some 'freebee' Wag Aero catalogues on the front table and precipitated a minor stampede. I was in the front row and barely got out of the way with my copy.

Eric welcomed and introduced visitors who included - Mike Thompson, Tod Shea Jodel D-9 (Rockcliffe), Bruce Nally, Don St. Denis, Mike Donaldson, Joseph Loch, and Cecil Dick.

Eric mentioned the sudden passing of Bill Roderick and mentioned that he, Ted Slack and myself had been down to the funeral at Oakville. Eric also said that on behalf of the Chapter, \$50.00 has been donated to the Falk Cancer Institute in Toronto.

Other news - Bruce Hamer has sold his Ercoupe

- Deric Dods announced that an SAR helicopter will be on display at Rockcliffe at 1830hrs, Tuesday April 7th. A talk on the role of SAR is to be presented. The evening is sponsored by the 99's.

- Garry Fancy has built a fiberglass fuel tank for the Skybolt and he talked about how he did it.

- Doug Richardson is still making speedy progress on his CH250 and he showed us a very interesting time saving gadget called a Magnetic Clamp. This wondrous little device is ideal for holding steel tubing in a variety of angles for welding.

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President: Eric Taada 749-4264 Vice-President: Roger Fowler  
Secretary: Andy Douma 225-1559 Newsletter: Dick Moore 836-5554-(work 564-4299)  
Aircraft Operations: Garry Fancy 225-0454 Treasurer: Gord Standing: 224-2879

- Once again it was mentioned that we would like to see someone take charge of the proposed T-hangar project at Carp. Any volunteers ?.

Garry Fancy introduced the evenings Guest Speaker Major Wayne Clubine.

Major Clubine is a 1975 graduate in Electrical Engineering from RMC. After a couple of years up in North Bay, he worked in California on the CP140 Aurora Project as Avionics Officer from 1977-82. He has also attended the USAF Academy in Dayton Ohio where he earned his Masters Degree in Electrical Engineering. He is currently employed as a specialist on navigational flight controls with the Directorate of Avionics, Simulator and Navigation Engineering at DND.

Using numerous transparency projection Major Clubine gave us a facinating detailed look at the Loran C navigational system. He explained its history and evolution from the late 50's early 60's by the US Department of

Defence. He talked about its present range (coastal US and Canada and Great Lakes region) and stated that although the US was planning to close it's mid continent gap, Canada was unlikely to extend coverage to our far northern regions. He stated that Canada will be using the new Global Positioning System when it comes on stream sometime in the 90's. In the meantime, he stated that Loran C is probably the best navigational system available to aircraft today especially to us amatuer builders. It is relatively inexpensive, easily installed and when within the range of the station, it is very accurate. A high quality unit has a theoretical accuracy of  $\pm 3$  meters, in practic however it is more like  $\pm 25$  meters. A lower quality unit would have a practical accuracy of some  $\pm 100$  meters. You should be able to find the airport. For more information, refer to a writeup on Loran C appearing in the November '86 Newsletter.

Wayne also brought in a series of slides on the Global Positioning System. This system consists of a ground station and 18 high orbiting satellites, a sort of high flying Loran C system. The advantage of this system is that it will give 3-dimensional positioning at any point on the earths sphere. The major problem with this system is that it is well behind operational schedule due to the major malfunctioning of its launching system, the space shuttle.

Wayne concluded his talk after answering a number of questions from the audience.

Many thanks to Major Clubine for this most interesting presentation.

After coffee break Doug Richardson told us about his magnetic clamp available from Canadian Tire, and Garry Fancy explained how to build a fiberglass fuel tank.

We the members also thanked Alex Fulton for looking after refreshments over the past years, and we thanked Jack Dods for maintaining the magazine files.

Submitted by Andy Douma, Secretary

W.E.B. (Bill) RODERICK

The Canadian amateur built aircraft movement lost a staunch friend and valuable supporter with the recent passing of W.E.B. (Bill) Roderick of Ottawa.

A lifelong aviation enthusiast, Bill received his Bachelor's and Master's degrees of Applied Science in Aeronautical Engineering from the University of Toronto. Following graduation he went to work for deHavilland Aircraft of Canada and for ten years was involved in flight test, aerodynamic and performance analysis as well as structural design of the deHavilland projects. Later he moved to the Lockheed Aircraft Corporation in Marietta, Georgia, where he was employed as a Group Leader in the structural design of the C5A aircraft. While living in Georgia, Bill became involved with the local EAA chapter in 1966 and his association with EAA and the hobby continued for the remainder of his life.

In 1967 Bill left Lockheed and moved to Ottawa to take up employment with the National Aeronautical Establishment as a structural design engineer. When Ted Slack was asked by Herb Cunningham, then the EAAC President, to form a technical committee to represent EAAC in Ottawa, Bill Roderick was one of the first people asked to join the committee during the winter of 1970-71. At the time of his death Bill was one of two original members of that group still serving with Ted on the Canadian Aerosport Technical Committee. Although he never became an EAAC member, Bill's contributions to the Canadian amateur built movement over sixteen years were invaluable and many of the advances in the DOT/EAAC relationship over the years resulted from the hard work and free time which Bill and others on the committee freely gave to the cause.

One example of this devotion was Bill's work in the process of clearing the original Pitts Sl for aerobatics in Canada. At the time that Canadian enthusiasts were clamoring for a waiver to legally perform aerobatics, there was no original stress analysis of this aircraft available from the designer, the originals having been lost in a fire. Undaunted, Bill obtained a copy of the Pitts drawings and set about to carry out a complete stress analysis of the primary structure, a task which took some 400 manhours. As a member of Ted's committee, Bill did this work voluntarily although to have had it done under contract could have cost approximately \$20,000.

(cont.)

Many years later Bill carried out a similar extensive analysis on the CUBy design. There were also variants of the Pitts which were produced by Gordon Price and the late Frank Jenkinson. Each of these had to be examined in detail notwithstanding the clearance already obtained on the original Pitts Sl. It is safe to say that there is not an aerobatic amateur built aircraft in Canada which has not benefitted from Bill's endeavours over the years.

Other contributions resulted in the 1972 changes to the DOT regulations governing the construction of amateur built aircraft in Canada, the writing of criteria for amateur built helicopters, the approval of the Executive and Scorpion helicopter designs for construction in Canada, criteria for the approval of composite aircraft construction in Canada, participation in the formulation of ultralight aircraft regulations and many others. Bill dabbled in radio controlled model aircraft when he found time, which was not very often. Years ago he had started designing a two place amphibian but this hobby, too, was set aside in favour of his tech committee tasks which included presentations at the annual EAA conventions at Oshkosh as well as the three technical symposiums hosted by EAA Chapter 364 in Oshawa.

Bill was noted for his willingness to help others, his quiet sense of humour and for the smile which could make any stranger seeking his assistance feel completely at ease. He will be greatly missed by his legion of friends and particularly by his cohorts on the Canadian Aerosport Technical Committee with whom he has willingly toiled over the past sixteen years on behalf of all Canadian amateur built aircraft enthusiasts. Fortunately, the benefits which have resulted from his labours will continue to be felt for years to come.

DATE: Wednesday 1 April 1987

LOCATION: 29 Cavanagh Drive, Carp

ATTENDING: Peter, Richard Moore, Andy Douglas, Gord Standing, Richard Moore, Andy Douglas.

COMMENTS FROM THE TREASURER

A couple of newsletter issues back, I published the financial statement of the chapter. I outlined the financial figures of the worth of the chapter and where we derived our revenue for the past year. It was shown that the majority of our revenue comes from membership fees and from hangarage and tie down fees.

After reviewing the membership list, I have determined that 44% of the old members have not paid their membership dues. We have to date recruited eight new members while on the other side of the coin, we have the losing potential to date of 44% or 24 old members. If you allow this to happen, the chapter will take a catastrophic step backwards.

In order to forge ahead and complete chapter projects, pay our operating expenses, for example, taxes, insurance, publish and mail the newsletter and pay our common costs to Alert Aviation is but to name a few. To be able to do all this, we rely heavily on YOU the member.

If after reading this, you find that you fall into the delinquent category, please forward your membership dues to either the Chapter address, which is EAA Chapter 245, Terminal Box 8412, Ottawa, Ontario, K1G 3H0, or to myself, Gord Standing, 65 Center Blvd., Nepean, Ontario, K2C 2M4; or better still, come out to a chapter meeting, pay your dues and enjoy an evening with the other chapter members.

For those wishing to mail your membership, the following form is for your convenience.

DISCUSSION: This was discussed at the March executive meeting and a rough draft was made up. ACTION: Andy will make a printed draft and circulate it to the members.

- Renewal
- New Members
- Own Home Built
- Own Production A/C

Reg -

NAME.....

ADDRESS..... CITY.....

POSTAL CODE..... TELEPHONE (H).....

(Bus).....

ASSOCIATE MEMBERSHIP.....\$25.00

FULL MEMBERSHIP.....\$25.00

DATE: Wednesday 1 April 1987  
LOCATION: 29 Cavanagh Drive, Carp  
ATTENDING: Peter Plaunt, Eric Taada, Roger Fowler, Gord Standing, Richard Moore, Andy Douma.

- AGENDA: 1 - April mailings and meeting date  
2 - April Meeting speaker  
3 - Advertising and membership application form  
4 - Letterhead and newsletter front page design  
5 - Hangar construction  
6 - Ramp Safety  
7 - Annual Fly-in breakfast  
8 - Lawnmower aquisition

ITEM -1 April mailings and meeting date.

DISCUSSION: Note that the April meeting date is ONE WEEK LATER THAN USUAL to accomodate the schedule of the guest speaker.

Newsletters will be sent to all members this month with the still to pay people red circled to remind them that membership fees are past due.

ITEM -2 April meeting speaker.

DISCUSSION: We have confirmation that Captain Clive Barratt, Director of Flight Safety, will speak and bring a film and video.

ITEM -3 Advertising and membership application form.

DISCUSSION: This was discussed at the March exec meeting and a rough draft was made up.

ACTION: Andy will make a printed draft and circulate it for executive approval.

ITEM -4 Letterhead and Newsletter cover page design.

DISSCUSSION: After some discussion it was decided that we could use a proper letterhead for correspondence with other chapters and organizations. Also, it was decided that a new cover page for the newsletter was in order..

ACTION: Andy will check into this and get an estimate for printing various numbers of each.

ITEM -T Hangar construction

DISCUSSION: Ken Cavers has four 45 foot heavy steel trusses for sale for \$250.00 each. These can be the basis for a large four bay row hangar. We need to find out who is interested in building and we need to get a



## LORAN-C PRODUCT COMPARISON

	STS 110	Narco 820	II Morrow 602 Apollo I	Arnav R-15	Micro-Logic ML-6500	Narco 840	Arnav R-15B	Fisher 500	II Morrow 611 Apollo II	Arnav 21	Arnav R-30	II Morrow 612B Apollo II	North-Star MI
Manufacturers Retail Price	\$249	\$1,197	\$1,295	\$1,495	\$1,695	\$1,795	\$1,995	\$1,995	\$2,495	\$2,795	\$2,995	\$3,095	\$3,995
Antenna with Coupler & Mounting hdw. supplied	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Waypoint Capacity	110	200	200	150	125	200	150	200	100	200	150	100	250
Hold & Store Present Position	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Auto Warning/Accuracy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Not Req.	Yes	Yes	Not Req.	Yes
Auto/Manual Landmass Propagation Correction (ASF)	Man	Auto	Man	Auto	Auto/Man	Auto	Auto	Auto	Auto/Man	Auto	Auto	Auto/Man	Auto
Auto/Manual Selection of Secondarys	Auto/Man	Auto/Man	Man	Auto/Man	Auto/Man	Auto/Man	Auto/Man	Auto/Man	Auto/Man	Auto	Auto/Man	Auto/Man	Auto
Type of Display	Vacuum Fluorescent	LCD	LED	LCD	LCD	LCD	LCD	LCD	LED	LCD	LCD	LED	LED
CDI on Receiver Display	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Warranty Period (months)	36	24	26	18	12	24	18	12	26	18	18	26	36
Unit Height	2"	2.5"	2"	2"	2.08"	2"	2"	2"	2"	3.25"	2"	2"	2"
Unit Width	6.25"	6.25"	6.25"	6.25"	6.25"	6.25"	6.25"	6.31"	6.25"	6.25"	6.25"	6.25"	6.25"
Unit Length	9"	11.05"	11.0"	10.8"	8.30"	11.5"	10.8"	11.94"	11.0"	10.7"	10.8"	11.0"	11.75"
Unit Weight	3.5 lbs.	4.0 lbs.	3.7 lbs.	2.75 lbs.	4.1 lbs.	4.1 lbs.	2.75 lbs.	2.75 lbs.	3.7 lbs.	4.6 lbs.	2.75 lbs.	3.7 lbs.	4.2 lbs.
Notch Filters (Fixed)	8	6	8	0	6	6	0	8	8	0	0	8	8
(Auto)	0	0	0	3	0	0	3	0	0	3	3	0	0

SOURCES: The LORAN, RNAV & NAV/COMM GUIDE, Keith Connes; ©1986, AOPA PILOT 1986 Avionics Directory & Buyers Guide.

Specifications may change without notice.