OTTAWA, ONTARIO

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



CARB HEAT - Hot Air and Flying Rumours

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

Sept. '86

EAA 245 Meeting

June 20, 1986

Carp Airport

- Eric Taada opened the meeting at 8 p.m. with 22 in attendance. Eric thanked Gord Standing for his efforts at the breakfast. 212 tickets were sold giving \$636. A \$10. donation brought the total to \$646. Actual cost was \$286.67 leaving a profit of \$359.33. Next years fly-in is scheduled for June 21, 1987.
- Next, thanks went to Ted Slack for the concept of the hangar-door as well as Dick Moore and Henry Beaudoin for their efforts in the detailing and construction.
- A new-old lawn mower had to be purchased at a cost of \$150.00 but it is not quite up to the job. We will have to buy a rider one day.
- The last meeting of the West Carleton Airshow Committee was held June 22 at Mylite and Insurance was a big issue.
- Gord has declined to sell hot dogs and just sell drinks and chips. Towards this venture Gord has requested a \$100. initial cash outlay. Ken Cavers proposed, seconded by Bruce Hamer that Gord proceed. All agreed. Coke wanted \$7.95 per case and no benefits. Pepsi wanted \$7.50 per case and all full cases redeemed. Also for \$75.00 we can rent a booth and have it delivered and picked up.
- Actual cost for the hangar door has turned out to be \$2,500. compared to the \$2,200. initially approved. A request for the additional \$300. was unanimously approved.
- Eric Taada reported that Paul Poberenzy has advised that the EAA insurance of \$1 million (which does not cover any airplane accidents or accidents caused by the insured) is only valid if the Chapter associates itself exclusively with EAA (i.e, with no other organization such as EAAC).

Pres: Eric Taada 749-4264 Vice-Pres.: Roger Fowler 225-6070 Program Director: Terry Peters 745-7466 Newsletter: Dick Moore 836-5554 Peter Plaunt Aircraft Op.: Garry Fancy 225-0454 Treasurer: Gord Standing 224-2879 839-2283

- Homebuilder awards were given to Lionel Robideau for this Thorpe 18 and to six members representing the "Town Flying Club's" Pietenpol. The latter was started in 1967 with about 21 to 22 people. It had its first flight in 1982. Included in the award were Jack Dodds, Jim Butler, Ken Cavers, Bruce Hamer, Ted Slack and Jim Bradley.
- The club presented Ted Slack with an honorary life membership in recognition of his outstanding contribution to EAA beginning about 22 years ago when he first moved to Ottawa and including 15 years on the Technical Committee.
- Guests included Rodney Stead, Elinor Rourk and Guy Lefebvre (from Maniwaki).

NOTES ON TALK BY DALE LAMPORT

(Engineer with First Air on B727's)
"Designated Inspector" Program

The Department of Transport still wants to do the final inspection at the airport and the final issue of paper work, Dale reported, but the Designated Inspector will do the preliminary and pre-cover inspections.

Until the DOT issues the Designated Inspector manual, Dale, who will be one, cannot officially do anything. The program is in progress however and DOT is keen to get it going.

Dale said that quality workmanship and conformity to drawings are two key things being looked for. He intends to check work against drawings in addition to the things normally checked (carburetor, fuel lines, cables).

Other comments from Dale: Two stroke engines don't seem to need carburetor heat because there is a less pronounced venture. However, there is some controversy over this.

Apparently a marvellous way to get bugs off the windscreen is to go through cloud at 300 K. (Works for First Air on the B727's). For the average homebuilder on the other hand

NOTES FROM LIONEL ROBIDEAU

ON FLARING TUBING

Copper tubing (as opposed to aluminum tubing) work hardens and can crack.

Conventional AN specification fittings are better than other types but the old type AN807-6 (single unit) is very difficult to get.

To bend aluminum tubing, use a clothes line pulley or the indentation just under your knee cap!

At the last meeting in June, held in the hangar, I presented to the membership how I thought some revenue could be brought into the chapter by running a soft drink stand at the West Carleton AirShow.

The membership gave me a vote of support and I proceeded with

the venture.

The following is a report on the outcome of the operation. On Friday, two days before the airshow, the trailer and the soft

drinks were delivered to the hangar.

The next day, Saturday, Ken Cavers and I spotted the trailer on the space allocated to us and we waited in vain for a refrigerated truck that had been promised us by Bradley's to arrive. We were to store the soft drinks in this vehicle to keep them cold. When Bradley's refrigerated truck failed to arrive, a second similar vehicle from Petersons Ice Cream also failed to materialize.

On Sunday, the day of the airhsow, it rained from about seven am. to about nine am. when it became sunny but quite hot and humid. The drinks were packed in ice and were kept quite cool as long as the ice lasted. wadrade of pancaks

The sales were quite brisk at the start but very quickly went into high gear when it became very hot and humid and people didn't care whether the drinks were cold as long as they were wet.

Altho we sold 51 cases of soft drinks, many more could have been sold if we hadn't been subjected to the down pour of rain that started about 2:30 to 3 pm. when thousands of people just left the airshow. At that time sales just dwindled to zilch. The sales of a sale of

It is recommended that, should an airshow be held next year, the chapter should again become involved in a similar venture.

There are several other facets that could be explored, such as an outlet for ice cream bars or a coffee and do-nut stand.

It was very noticeable that coffee wasn't available at any outlet at the airshow.

In ruture, should the chapter run this type of outlet, we should not depend too heavily on others, like the empty promises for refrigerated vehicles, but turn to our own ingenuity, for Lord knows the chapter is loaded with it.

A hearty thanks goes out to all who participated in running the trailer.

The following persons worked in the trailer dispensing soft drinks and chips. delan Standing who worked the counter and hande

Bill Devine Mrs. Devine end bebr John Smiley and Son Henry Beaudoin Dick Moore To Joyce Cowanlock who kapt the tables of american - as Jack Dods

Gord Standing one year trad has minbused when of kapt the generator going - a gold medal effort fella's. To all who stayed to clean up after the fact, my appreciation.

make light work - its amaring now fast everything can be packed out back into place.

gold star to her.

first class job Brucs.

FATHER'S DAY

To refresh memories June 15th dawned a super day. There wasn't a cloud in the sky and the winds were very light. The day of fly-in breakfast had arrived.

My day along with others began at 4:45 a.m. but upon arriving at the hangar with my wife, Helen, we found Ken Cavers, his wife Grace and my son Tom were already there.

It took about 45 min. to an hour to set everything up so when we became operational the workers were fed and the first customers were served about 7:45 a.m.

As a matter of statistics we had 69 aircraft fly in and their captains signed the register. As far as food stuffs were concerned 33 lbs of bacon, 420 eggs, 22 lbs of sausages, gallons of orange juice and coffee, hundreds of pancaks and all the condiments that supported such a breakfast.

A big tip of the hat and a well-done job to Ken Cavers and his crew of Jack Dods, Jim Butler and Andy Douma who had their hands full of aircraft in the parking areas.

To Grace Cavers who demonstrated her superior ability to turn out fried eggs.

To Roger Fowler who capably cranked out bacon and sausages at a great rate.

To Eric Taada and his able help, Dick Moore. What can I say their amazing flourishes when flipping pancakes kept all in awe just waiting for them to miss the frying pan, but they didn't, not once. Good show fellas.

To Peter Plaunt and Tom Standing who turned out the gallons of orange juice and coffee and hundreds of slices of toast. An outstanding job.

To Helen Standing who worked the counter and handed out the food - a gold star to her.

To Bruce Hamer who sold the breakfast tickets and guarded the cash a first class job Bruce.

To Joyce Gowanlock who kept the tables orderly and clean - an excellent job Joyce.

To Henry Beaudoin and Gary Fancy who filled in where needed and who kept the generator going - a gold medal effort fella's.

To all who stayed to clean up after the fact, my appreciation, more hands make light work - its amazing how fast everything can be packed up and put back into place.

There is no doubt about it, this has been the most successful Fly-in Breakfast that the Chapter has had to date. The weather cooperated beautifully and along with the total support of everyone who worked this function, is the reason it turned into the very successful conclusion that it did.

My sincere thanks.

Gord Standing

FINANCIAL STATEMENT

Expenditures

7-Up Pure Spring Ottawa	\$417.30
Trailer	75.00
Cooling Tubes	10.00
Tax on Trailer and Tubs	5.95
Hostess (Potato Chips)	38.88
Loebs (straws)	5.60
Aprons	12.78
Ice of manchand control to I comby its	40.00
West Carleton Airshow (Space Rental	25.00
Float medores that ent of - then have	139.00
the first an inclination brigging from the stable of \$1	
Total Expenditu	ures \$769.51
in ward	permitted of LATMAR server
Total Sales Soft Drinks and Potato Chi	ips \$1,118.18
Total Francish to a line of the second of th	
Total Expenditures	<u>769.51</u>
Profit	\$ 348.67
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This amount has been deposited to the Chapter Account.

Carry on, Ted and Company

At its awards meeting on Friday, 20 June 1986, EAA Chapter 245 (Ottawa) presented an Honourary Life Membership to Ted Slack, this being the third such honour awarded by the Chapter - the previous two being to Father John McGillivray and Bill Laundry. This is an honour long overdue, perhaps largely due to the fact that Ted is still in Ottawa - his continuing efforts taken for granted - and also to his self-effacing reticent demeanour, a characteristic shared by Father John and Bill. As is characteristic of his associates at the National Research Council's National Aeronautical Establishment (NAE) Flight Research Laboratory, Ted prefers to avoid flashing lights and theatrics and stay very much in the background. Consequently, his recognition is substantially less than he deserves.

To list Ted's accomplishments would require a very lengthy treatise.

He has been involved in the amateur-built aircraft movement for over 22 years, a member of EAA Chapter 245 since its inception and, prior to that, a member of the original Ultralight Aircraft Association of Canada. He has held various positions on the executive of the Chapter. Among many other things, he initiated and supervised the building of a Pietenpol Air Camper as a Chapter project, formed the Bytown Flying Club. designed the hangar/lounge/workshop facility with the capable assistance of Henry Beaudoin, and, jointly with Eric Taada and the late Frank Cianfaglione, supervised its construction. - Supervised is hardly an appropriate word. Ted also did a lion's share of the work, as did Frank, Eric, and Henry.

A friend and associate told me that Ted works 48 hour days, 10 days a week. This is not hard to believe.

Many will remember that Ted formed the EAAC Technical Committee in 1970, and that this body subsequently became the model for the international EAA Technical Safety Committee, of which Ted is Co-Chairman and a founding member. The Tech. Committee was formed in response to a perceived need for such. It owes its existence - at least in part - to the first aerobatic contest held in Canada (Peterborough, 1968). This event brought attention to the fact that homebuilt aircraft - including the legendary Pitts Special - were not approved for aerobatics in Canada. Several competitors were told they could not be permitted to fly. Imagine their chagrin.

The first activity of the Tech. Committee was to perform stress analysis on the Pitts Special and present a report to Transport Canada, recommending granting of an aerobatic waiver. The Department was reportedly impressed with the report and was quick to comply.

This was followed by similar activity on behalf of the Steen Skybolt, Zenair Zenith (with aerobatic spar), Wag-Aero Acro Trainer (Super Cuby), Jenkinson FJ Special, Zenair Acro Zenith and Super Acro Zenith, Sorrell Hiperbipe, Ultimate Pitts, and Christen Eagle. Few people realise the monumental amount of work involved in completing the foregoing. For each design, it was necessary to perform a detailed check of drawings and structural details, looking for errors, design flaws, etc.; and to perform a complete stress analysis and/or check the designer's stress analysis (if available) - an arduous task, to say the least. Also, a thorough test-flight programme was required. It may be noteworthy that one of the two professional test pilots on the committee turned down a very lucrative private contract in order to be able to perform, without compensation, test-flights of an aerobatic aircraft. It was reliably reported that Transport Canada was most impressed with the calibre of work performed by the EAAC Technical Committee.

A few years after the formation of the Committee, Burt Rutan's Vari-Eze came on the scene and, predictably, captured the attention and affections of many. However, potential builders in Canada were informed that it would not be approved here due to its composite construction and somewhat higher wingloading than Canadian amateur-built aircraft regulations permitted at that time. Ted and Company set up a conference/workshop seminar at Centennial College in Toronto (3-10 Dec. 77) with Burt Rutan, Larry Haig (whose American Eaglet has a composite spar) and senior Transport Canada officials in attendance. At the end of a week of intensive sessions, Ken Owen, then Chief of Airworthiness, Transport Canada, and John Mew, Chief of Inspection, Superintendent Manufacturing and Maintenance, Airworthiness Inspectors, indicated they were very impressed with Burt Rutan and Larry Haig and foresaw approval of their designs and possibly other selected designs utilising composite construction, provided they met suitable criteria. Thus was paved the way for the construction of composite light aircraft in Canada.

When the ultralight (initially called microlight in Canada) aircraft came on the scene, Transport Canada was faced with the dilemma of either having to come up with regulations and licencing or tolerate unlicenced, unregulated use of airspace. Reluctantly, they chose to regulate the activity. They called on Ted Slack for advice, and Ted became involved as a consultant in the formulation of ultralight regulations for Canada. These were among the first such regulations formulated by any country.

As stated previously, to list Ted's achievements would require a very long list. Perhaps it would be sufficient to list some of the major achievements of the EAAC Tech. Committee while under Teds direction. In brief, it:

- (1) provided a self-policing agency for the amateur-built aircraft movement in Canada;
- (2) provided a technical advisory service with extensive engineering and flight consultative capability;

- effected improved safety awareness and responsibility;
- (4) established excellent rapport with Canadian civil aviation legislators and authorities;
- (5) effected new, improved, and expanded regulations governing amateurbuilt aircraft, e.g., increased gross weight, wing-loading, number of seats, etc.
- (6) obtained Canadian aerobatic approval for a number of amateur-built aircraft;
- (7) obtained Canadian approval for composite construction of selected aircraft designs;
- (8) obtained Canadian approval for selected amateur-built helicopters;
- (9) assisted (at Transport Canada's request) in the formulation of ultralight aircraft regulations;
- (10) liased with EAA chapters in the preparation and presentation of technical and maintenance symposia;
- (11) initiated, and participated in the production of, Transport Canada's Amateur Builder Aviation Safety Letter;
- published numerous engineering, technical, and safety bulletins, reports, newsletters, etc.

In 82/83, there was a complete change of Tech. Committee personnel and its headquarters and equipment were moved from Ottawa to Mount Albert. Members of the new committee tackled their work with predictable enthusiasm.

For some time, Ted and Company had seen a need for a similar technical committee which is totally autonomous and not affiliated with any single organization. In 1983, they formed the Canadian Aerosport Technical Committee, and immediately found themselves immersed in the same type of activities as before. Because of the excellent rapport established with Transport Canada, they continue to receive requests from the Department for consultative services regarding aerobatic waivers, amateur-built aircraft approvals/requirements, standards, etc.

Joined by the former Ottawa-based members of the EAAC Technical Committee, Ted carries on his dawn-to-dawn schedule of work-work-work. Not content with voluntarily contributing many extra hours of gratuitous work for his employer, Ted divides his 48-hour days between NRC Flight Research Lab. and the Canadian Aerosport Technical Committee office. It is rumoured, however, that he does find some time to go home. There must be some truth to that rumour, since he built at least one house in recent years. His contuing involvement with the St. John Ambulance (first-aid instructor) and the Ottawa Ski Club (director, cross-country marathon organizor) would also seem to indicate that, contrary to popular belief, he doesn't spend all his time at NRC and the Committee office. And, oh yes, he does have a happy home life. - living proof to the old adage "Absence makes the heart grow fonder".

While trying to extend kudos to Ted, it is probably less than appropriate to ignore the other members of his committee, which is presently made up of old stalwarts George Reid, Bill Roderick, Murray Morgan, Doug Laurie-Lean, Stan Kereliuk, and a couple of not-so-old stalwarts Eric Taada and Jim Fontana. In the early days, the EAAC Technical Committee included Doug McGregor and Dr. Karl Doetsch, now a director of Canada's space programme.

Of the many achievements made by Ted and Company since formation of the new committee, the following highlights may suffice to indicate some measure of the volume and value of the work performed:

- (1) Approval of LeGare (now Aero Composites) Sea Hawk.
- (2) Approval of RotorWay Scorpion and Exec helicopters, paving the way for construction of amateur-built helicopters in Canada.
- (3) Amendment of amateur-built aircraft regulations to allow up to 4 seats.
- (4) Proposed changes to Transport Canada's Engineering and Inspection Manual.
- (5) Ultimate Aerobatics 10 Dash 100 Albertan aerobatic waiver.
- (6) Jenkinson FJ Special (modified) aerobatic waiver.
- (7) Development of standards for primary category aircraft.
- (8) Approval of Star-Lite.

Additionally, reports have been delivered at Oshkosh: In 1985, Murray Morgan and Bill Roderick delivered reports entitled "Flight Testing to Establish the CG Limits" and "Joints, Fittings, and Detail Analysis", respectively. The latter was subsequently published in Kitplanes magazine. This year (1986), Doug Laurie-Lean delivered a report entitled "Mechanism of Rotary Winged Flight".

Since formation of the Committee, Ted has continued to pay the rent for the office - formerly occupied by the previous EAAC Tech. Committee - out of his own pocket. A trickle of donations, a few of them generous, help meet other expenses. It may be fitting to add that generous donations have been received from Zenair, RotorWay, and several individual donors who wish to remain anonymous.

Ted, of course, is not one to ask for donations; and, at time of writing, is unaware of this article. However, although this was not the purpose of the article, I think it is safe to say that donations are always welcome.

And so, although we haven't heard much about them lately, Ted and Company are very much alive and well, still working very hard and continuing to make an invaluable contribution to sport aviation in particular and aircraft safety in general.

Should you wish to contact Ted for any reason, he may be reached at:

Canadian Aerosport Technical Committee, Suite 104, 1801 Riverside Drive, Ottawa, Ont. See Setting Of Latington DAAB and aver KIG OE7

Phone (613) 737-0457 (most evenings, 7 PM to 3 AM, or thereabout). sew committee, the following highlights may suffice to indicate some me

nateuction of amateur-built helicopter Jim Butler

Amendment of amateur-built aircraft regulations to allow up to 4 seats. Proposed changes to Transport Canada's Engineering and Inspection

Manual.

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TECHNICAL TIPS

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Garry Fancy

LYCOMING STARTERS - BENDIX DRIVES

While attempting to start my Lycoming engine recently I noticed that the Bendix drive on the starting motor remained in the forward (engaged) position. Suspecting another problem with the Bendix I removed the starting motor and asked several people about this "problem". No one could really come up with a solution as to why the Bendix did not return to its compressed position. I was about to buy a new Bendix drive when I went to the Ottawa Flying Club and asked their helpful young A.M.E. "Dave" (sorry I forgot his last name). Dave quickly diagnosed the problem there was no problem. A Bendix drive will remain in the forward (engaged) position after an attempted start until it is spun up and thrown back by the running motor.

Thank you Dave. Incidently, Dave probably typified the average flying club A.M.E. - very helpful, friendly, obviously safety so, aithough we haven't heard much about them lately, Ted

An additional point for us home builders re Bendix drives. Should you require one, the "aviation" Bendix cost around \$125.00 and the "automotive" Bendix cost \$25.-\$35. I have been using an automotive one and it seems okay.