# Carb Heat

### Hot Air and Flying Rumours

## **NEWSLETTER**

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## **MAY 1992**

**NEXT MEETING: THURSDAY 21ST MAY** 

**TIME: 1930 HRS** 

PLACE: CHAPTER 245 HANGAR, CARP AIRPORT

TOPICS: - Introducing - the new hydraulic weight scales with a "hands on" weight and balance demonstration by Dick Moore.

- Update on our lease negotiations with the new Airport Authority.

President: Lars Eif 837-6680 Vice-president: Gary Palmer 596-2172

Secretary: Luc Martin 744-5347 Treasurer: George Elliott 592-8327

Editor: James Oliff 724-6123
Assistant Editor: Andy Douma 591-7622

Aircraft Operations: Dick Moore 836-5554

Membership: Manfred Ficker 839-2292
Tool Crib: Andy Douma 591-7622
Classifieds: Andy Douma 591-7622

Publishing: Dick Moore 836-5554

## President's Corner

Recently, Rem Walker, the Chairman of the EAA Canadian Council, was asked by Transport Canada what the EAA does to promote safety for its members and for general aviation. By way of answer, Rem prepared an extensive list of services and initiatives which are aimed at making our sport safer. When I read the list, it occurred to me that all of us should be more aware of what help is available to us. In particular, the newer members of Chapter 245 who may be contemplating starting an amateur—built aircraft project should find the following information useful.

#### CHAPTER ACTIVITIES

- EAA Chapters have been provided with the complete portfolio of information on Transport Canada's Service Difficulty Reporting Program. Also publicized the program through the pages of EAA's monthly magazine, SPCPT AVIATION and the Canadian Cwners and Pilots Association's monthly publication.

  CANADIAN HOMEBUILT AIRCRAFT NEWS.
- Encourage EAA Chapters to have one member gather and disseminate safety information at the meetings of the chapter.
- Encourage EAA Chapters to publish safety items in the chapter Newsletter.
- Chapters have a list of people with special skills such as welding, metal working, fabric, engines, etc. If a builder needs help with a specific problem he can refer to the list and arrange to speak with the skilled individual.
- Chapters maintain libraries of video tapes. "How To" manuals and reference publications.
- Chapters have an inventory of special tools to enable tasks, such as cable swaging to be done safely.
- Qualified individuals, AMEs, Technical Counselors, etc. are invited to speak on their topic of expertise during regular meetings.
- Participate with local flying clubs, aviation groups, etc.. to keep members up to date on local changes in the airport traffic procedures, new weather reporting capabilities, and make use of local Transport Canada personnel, wherever possible, to broaden the knowledge of the local scene.
- Arrange for Transport Canada's Regional Aviation Safety Officer to speak to the group on such topics as "Pilot Attitudes and Decision Making", etc.
- Sponsor learning opportunities for one-day sessions on welding, sheet metal, covering, along with specialized topics such as wiring, firewall forward, brakes, weight and balance, etc.
- Chapters provide publications that are safety oriented both in building and flying and may also publish this information in their newsletter.
- Encourage the test flying of newly-completed aircraft to be done by one experienced person rather than having it done by the perhaps-inexperienced builder. In this regard the joint publication of the EAA and FAA, the Flight Test Manual, is a valuable asset.
- Invite outside specialists such as people from Aerobatics Canada to provide learning opportunities in different (but sometimes closely related) topics.
- Chapters trade news/etters resulting in an exchange of information with other groups of like interests.
- Encourage the provision of youth-oriented programs and scholarships to help young people receive qualified training in the field of their aviation interest.

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## CHAPTER ACTIVITIES (cont'd)

- Encourage qualified individuals to become EAA Technical Counselors.
- In some instances, where an accident has occurred, chapter people have secured the scene prior to the arrival of the CTAISB.
- Encourage builders to visit each others projects as an opportunity to learn and perhaps to provide helpful information to other builders.

#### IN-HOUSE PUBLICATIONS:

The Experimental Aircraft Association publishes magazines devoted to the specific and general needs of readers -

- SPCRT AVIATION covers all aspects of sport and recreational aviation.

  Aerobatics, Warbirds, Vintage and Antiques. Ultra-lights
  and Amateur-Built Aircraft. Regular features include
  building tips, safety alerts, airworthiness directives, etc.
- EXPERIMENTER the "How To" ragazine for the builder, loaded with tips, articles and featured items on all aspects of aircraft construction.
- SPORT AFRORATICS deals specifically with aerobatic aircraft both for sport and competition flying. Loaded with safety features for aerobatic pilots and builders of aerobatic aircraft.
- VINTAGE AIRCRAFT is for those with an interest in the safe maintenance. restoration and flying of these aircraft.
- WARBIRDS this magazine deals with the problems relating to the safe operation and maintenance of the heavy iron.
- EAA TECHNICAL COUNSELCR a newsletter specifically for those who are qualified as EAA Technical Counselors, volunteers who will visit a project to provide a second set of eyes and experience to benefit the novice builder.
- "HOW-TO" MANUALS on every aspect of building any type of aircraft.

  Also available on video tape.
- LIHRARY reference books and material on all aspects of building and flying. Copying service is available.
- REPORTS Accident/Incident reports on all amateur-built aircraft are available.
- DESIGN titles, sources and authors for those who wish to find out how to design an aircraft. EAA's publications also include articles on computer-aided-design.

#### SAFETY CUTREACH PROGRAMS

- Publicize incidents that are of specific interest to builders or owners, such as prop failures, wood rot, design deficiencies, etc.
- provide Accident/Incident reports for specific models of homebuilts.
- co-operate with others by providing safety information to them. For example, EAA provides the EAA Technical Counselor Newsletter to all DABI (Delegated Amateur-Built Inspectors) at no cost to them.
- use the pages of SPCRT AVIATION and other EAA publications to reach out to enthusiasts who are members of EAA.
- use the cages of other publications such as CANADIAN HOMEBUIL T AIR CRAFT NEWS to reach out to enthusiasts who are not members of EAA.
- in some cases the EAA Canadian Council will use direct mail, getting names from TCAG's computer-generated list, to send them vital information of urgent interest for their specific type of aircraft. This is to reinforce the other avenues used to get the information to those who may be directly affected.
- provide opportunities for people to attend one-week Air Academies to learn aviation skills in classroom and workshop settings.
- provide copies of CTAISB engineering reports to other aviation groups such as the Sport Aircraft Association of Australia Technical Committee, Popular Flying Association in England, the Recreational Aircraft Association in Canada and the Experimental Aircraft Association, Oshkosh, WI.
- encourage the builders of aerobatic aircraft, for example, to seek qualified instruction from International Aerobatic Club members, or others, rather than try it on their own. Similarly for those stepping up to aircraft with higher performance, and gyrocopters, helicopters. etc.
- urge prospective builders to carefully select the aircraft they will build to match their building skills and their piloting skills. Much information available on this topic.
- advise builders on the latest fuel developments for their aircraft engine.
- -regularly publish the availability of information such as Firewalls, Fuel Flow Test, Accident/Incident Reports, CTAISB Reports, Technical Reports from the Canadian Aerosport Technical Committee, "How-To" Manuals, EAA's Information Services, Library Materials, etc.
- advise readers of learning opportunities presented by aircraft manufacturers, suppliers of material etc., to enable them to use the products safely and effectively.
- supported the efforts of others to keep the Banff/Jasper airport open. Airports, the more the better, provide a safe haven in time of trouble with the aircraft or weather.
- encourage the support of COPA's Flight Safety Fund to enable the continued distribution of safety information through the Flight Safety Bulletin.

### SAFETY CUTREACH PROGRAMS (Continued)

- co-operated with Transport Canada and the Ultra-Light Pilots Association of Canada (UFAC) along with the LAMAC (Light Aircraft Manufacterer's Association), CASTC (Canadian Aerosport Technical Committee), RAA (Recreational Aircraft Association) and COPA (Canadian Cwners and Pilots Association) to develop policies for increased safety for Advanced Ultra-Light Aeroplanes (AULA).
- the EAA Canadian Council has gone on record as favouring the concent of upgrading or additional training for some offences or breaches of air regs. Punishment encourages the development of a belligerent attitude. Training, to upgrade skills or polish previously-learned skills, is a positive approach more likely to succeed in preventing further occurrences.
- It is the feeling of the EAA Canadian Council that regulations should be limited to those which serve a useful purpose to promote safety in the building, maintaining and flying of aircraft. Transport Canada's publicly stated intention to do this with the Advanced Ultra-Light Aeroplane policy is commended.

## CANADIAN AEROSPORT TECHNICAL COMMITTEE (CASTC)

The Chairman of the Canadian Aerosport Technical Committee. Ted Slack, was the 1989 recipient of Transport Canada's Safety Award for his outstanding contribution to safety in sport aviation. An example of his work is the Rotorways Helicopter Bulletin.

The EAA Canadian Council works closely with the CASTC on items relating to the safe construction and flying of aircraft. This is done by -

- publicizing the availability of technical manuals published by the CASTC.
- co-operating with the CASTC in the distribution of the EAA/FAA Flight Test Manual to EAA and RAA Chapters in Canada.
- publicizing the availability of the CASTC Reference Manual detailing thousands of items of information of use to those building an aircraft.
- consult with the CASTC regarding educational programs that will be of benefit to builders and pilots.
- consult with the CASTC on specific problems encountered by builders and referred to the EAA Canadian Council for assistance. The Council relies on the CASTC for its technical expertise rather than duplicating that which is in place through the CASTC.
- work with the CASTC in an effort to get programs such as the Computer Bulletin Board operational in Canada.

#### GOVERNMENT PROGRAMS

- have a working relationship with the Canadian Transportation Accident Investigation and Safety Board (CTAISB) to obtain Engineering Reports that are of particular interest to builders, such as Rotorways, Quickie, Sea Hawker, Star Lite. The facts of the report are published. Copies of the complete Engineering Report are made available at the Council's cost to copy, bind, taxes and mail.
- Monitor WAAN reports for incidents involving Amateur-Built Aircraft which may provide useful information to others when the CTAISB report is completed.
- Monitor these publications for items of interest to builders -
  - ADs
  - Feedback
  - Service Difficulty Reports
  - NAMEO
  - FAA publications
- provide publications such as Flying The Mountains, Winter Tips, Take Five For Safety, Light Aircraft Operating Tips and others available of a specific or general nature. These are sent to EAA Chapters and to those who ask for them specifically.
- attend, where possible, Transport Canada-sponsored Safety Seminars to learn more about this topic.
- In the United States, Ben Morrow of the FAA has initiated a Computer Bulletin Board for safety information relating to Amateur-Builts and Ultra-Lights. A person with a computer and a moder can call an 800 number and obtain information, in several categories, regarding homebuilts and ultra-lights. Can also enter information to the data base. Info is not traceable.

Originally it was thought the CTAISB would provide the money to provide an 800 number in Canada to tie in with the 800 number in the U.S. so that it would become an International Safety Net. The last word we received is that the CTAISB is concerned about liability problems and is shying away from the concept. Funding may also be a problem.

The Council has written in favour of the concept. It is difficult to understand why liability for the Computer Bulletin Board is any more of a concern that the print media. Printed material, even if received, may not be noticed. However, when a person hooks up his computer and searches for information he is going to pay attention when he finds it.

The Computer Bulletin Board concept may also be of use to AMEs in their day-to-day operations as it would relieve them of reams of paperwork storing and filing information for later use in their inspections.

- communicate with the Federal Aviation Administration in the United States, by letter and personal contact at meetings, regarding aviation safety documents and publications that might be of use in Canada. A sample is enclosed. This, and similar publications are copied and sent to EAA Chapters in Canada and to others on request. (Weight and balance).

#### CSHKCSH

The week of Cshkosh is a learning experience in more ways than one. The most obvious are listed -

- WCRKSHOPS- hands-on experience to learn engines, welding, woodworking, sheet metal, fabric. composites and general construction skills. One builder remarked that he had learned everything he needed to build an aircraft by attending Oshkosh for the week and participating in the workshops.
- FCRUM TENTS- topics presented by respected aviation designers, engineers and builders. Everything from "Why smart pilots de DUMB things" to "Flutter Analysis". Hundreds of learning opportunities on a daily basis.
- FIRST HAND- Oshkosh enables would-be builders to see, at first hand, the dozens of designs available and to speak, one on one, with designers, builders and pilots of these aircraft.
- HOMEBUILDERS CORNER during the week of Cshkosh qualified people such as Ted Slack and Bill Laundry volunteer their time and knowledge to answer questions about homebuilts. A large display of aviation books, manuals and safety literature is on display.

#### OSHKOSH INFORMATION SERVICES

At EAA Headquarters in Oshkosh a full-time employee provides information services to enable people to obtain answers to all their questions. This information service is but a phone call or letter away.

## Lot maintenance requirements 1992 EAA Chapter 245 Carp

When we first started looking for a means of mowing our grassy properties at Carp I originally recommended a 16 hp garden tractor with 48 inch cut capability as a minimum. Somehow we ended up with a well worn 12 hp Sears unit with 32 inch cut to manage nearly an acre of fairly rough grassy terrain. During the past few years it has become ever more obvious that this lawn tractor is no longer up to the task of adequatly keeping ahead of our fertile grasslands. The small wheels make for a slow rough and uncomfortable ride when moving and the lightness makes it nearly useless when we need to move aircraft in the soggy conditions of spring and fall. Some service problems have cropped up with the overworked mower and the tractor needs maintenance. To that end I have discussed at some lenght the need for a new and wider cut grass mowing system. I now recommend a 72 inch cut mower to handle our current three lots of 120 by 300 feet. Deducting the buildings from the total footage we have nearly two acres of variable and somewhat rough grass area to maintain. To run such a system we require more than a small garden tractor can offer.

I spoke with and visited 5 area and valley equipmwent dealers and I looked at a number of the available large size lawn tractors and a number of the smaller sized farm tractors. I also visited the annual Otttawa Valley Farm Show at Lansdown Park this week where I looked at and discussed our needs with many of the exhibiting dealers. I concluded that for our current and future needs that a small farm tractor would best meet our needs.

A small "estate size" farm tractor of 25-35 hp, diesel powered, is able to run a large rotary six foot cut mower from it's power take off shaft with ease. This tractors large wheels will make for a much improved ride for the operator. It is also able to easily tow aircraft in all seasons. It's smaller size makes it easier to maneauver around aircraft and it takes up less storage space. The three point hitch hydraulic system will allow addition of a scraper blade and snow blower to handle the small snow clean up jobs that the heavy duty Airport maintenance units are too large to manage. The scraper blade will also be very usefull with spreading soil and fill brought in to

fill the ruts and holes that are an annual problem in springtime.

I looked at and priced garden tractors, new and used and several estate tractors of various makes. The following is an abbreviated listing:

- Reis Farm Equipment Case, Case, International, Massey Massey 35 35hp, old, gas, \$3495.00
- B&T Macfarlan Kubota, Massey Kubota, 30hp diesel, 200hrs, \$19,995.00 Massey 231, 34 hp diesel, demo, \$10,995.00
- M&L Enterprises, Belarus
   Belarus 250, 30hp diesel, 525hrs,
   \$4500.00
- Dan R. Equipment, Deutz-Allis, Massey Massey 1010,1020,1030 series, 16-26hp diesel, new, no used ones available prices range from \$12-\$16 thousand.
- Metcalfe Service Centre, Deutz-Allis,
   Zetor and a lot of rental and used equipment.
   Deutz 20hp with mower, new, \$8750.00.
- Green Valley Sales & Service, John Deere. David Brown, 45hp diesel, 15 years old, \$3495 John Deere 920, 45hp diesel + loader, \$8600
- Zion Valley Farm Equipment, Zetor + used. Belarus 255, 25hp diesel, 4yrs old, turf tires, loader, \$8500.00

Scraper blades, new, 5 ft, run from \$400.00 to \$650.00.

Brush Hog mowers, new, 6 ft cut, are listed

from \$900.00 - \$1200.00.

New finish cut deck mowers run about \$1500.00. New flail type mowers cost about the same.

Snow blowers, used, 5ft, are available at good prices ~\$600-\$800 throughout the summer.

After all was said and done I brought my recommendation to the Executive board who agreed in principle to the expenditure of about \$8500.00 for the following:

- purchase of a used small tractor of 25-35 hp diesel powered with PTO and three point hitch.
- purchase of a rotary six foot mower.
- purchase of a medium duty scraper blade.
- purchase of a used five foot snow blower.

The choices hinged on servicability, dealer support, and most of all cost. I would like to get one of the small Masseys but the new cost is just too high and used ones were not available. The best "bang for the buck" was found to be a Belarus 250 from M&L Enterprises near Cobden Ontario. The Belarus is a Russian built 30 hp two cylinder air cooled diesel of compact size with 525 hours total running time and a trouble free history recently traded in on a larger unit. The delivered price with a 50/50 six month warranty is \$4500.00 plus taxes. These are not the prettiest of tractors and they have had their problems getting established in North America but they are a generally sound and servicable unit with good factory and service support. The tilt factor was the price. No one could beat the base prices with comparable equipment.

The board suggested that I present my proposal at last months meeting before I'd had a chance to check the Farm Show. I did. This resulted in a lively discussion with many questions and comments.

First comment came from a visiting member from another Chapter who stated that a small tractor would not be able to handle any sizable scraper blade. Subsequent discussions with members who approached me at coffee break indicated that a small, estate size, tractor was quite adequate for the type and size of property we need to maintain. The units primary function is to cut grass which it can handle with ease, scraping dirt or snow is strictly a secondary function. This was confirmed in discussions with dealers at the Farm Show.

Another individual from our Chapter was emphatic that the unit I recommended was the worst piece of machinery ever foisted on an unsuspecting farmer stating further that parts are impossible to obtain. He also said that the recommended unit was way too small to move

snow and that we needed a large tractor with lots of horsepower. These negative comments do not check out. At the farm show I learned that nearly one in five tractors sold in North America last year was the Belarus and that they have an excellent service record and very good parts availability. This is born out by my brothers experience. He is a convert from Ford tractors. He has been running several models of Belarus tractors for nine years and is very pleased with the prices, rugged performance, parts and service availability. He says that they are not a pretty piece of machinery and that there are improvements that he has made but he can't find comparable value and servicablility for the price.

Other people wondered why we don't check out the North American built tractors. I did. There aren't any. Very few small tractors are built in North America. The common names are all manufactured in Europe and the Far East.

There were also questions concerning the type of rotary mowers that are available such as a rotary bush hog type of mower which is simple, relativly cheap but gives a rough cut. Discussions with a member from the Rockcliffe Flying Club and others indicated that I should check out the flail type mowers which are more rugged and less likely to break when they hit somthing other than grass. I agree now that further checking is needed before a mower is purchased.

Other suggestions were made that I check out the farm auctions for good deals and that I pass the word that we are looking and that I see what turns up. Gee guys, I'd love to have the time to check out the auctions but I have a living to earn. It could also be a risky venture as I would not know if the unit were any good. Cheap maybe but good?

My recommendation to purchase the Belarus 250 from M&L Enterprises still stands. I know and trust the dealer and I believe that he will stand behind the product with support and service if needed.

I invite anyone with comments or tractors or equipment to sell or loan to contact me at 591-7622 evenings. This will be discussed again at the April meeting.

A.G. (Andy) Douma