

EAA 245

OTTAWA , ONTARIO

NEWSLETTER

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

Oct. '86

MEETING OF SEPTEMBER 19th, 1986

Meeting began at 7:30 with 30 members in attendance.

Gord Standing reported that the Chapter bank balance is \$2,339.91. Taxes are still outstanding however, they are expected to be about \$400. and as well an invoice from Bradley's is still to come and if it is like last year it should be about \$743.

Gord requested that \$800. be allotted to purchase a rider mower. Jim Bradley made the motion, seconded by Andy Douma and motion was passed.

Laurent Ruel is on his way again to winter (summer) in Australia, this time via Expo 86.

Eric Taada used the occasion of Laurent's last meeting of the year to thank him on behalf of everyone for the incredible amount of work he has done on the Club House in the last short while. Every door in the building has been re-designed, engineered and/or restored. The outhouse has a new metal roof and an overhauled door. As well, he has installed all the eavestroughing on the Club House. He has also looked after grass maintenance. The Club has indeed benefitted from Laurent's generosity, with his time and talents.

Henry Beaudoin reported he is now painting his Cuby but he has a little trouble. It is important to observe the temperature range given on the reducer used with acrylic enamel paint.

Gord Standing has his turtle deck cut out and his gas tank mounted.

Gord also reported that he used Garry Fancy's technique of putting mixed epoxy resin in the freezer to extend the pot life. He says it works real well. In fact he was so impressed that he though he would see just how long it would remain as a liquid and left it in the freezer overnight. Well the next morning it was pretty stiff. Later that day he was served apple pie that had been stored in the freezer and it tasted just like apple pie a la epoxy resin.

Charles Martel is building a Sportsman 2+2 and is ready to mount the cowling.

President: Eric Taada 749-4264
Secretary: Terry Peters 745-7466
Aircraft Operations: Gary Fancy 225-0454

Vice-President: Roger Fowler 225-6070
Newsletter: Dick Moore (home)836-5554(work)231-4299
Treasurer: Gord Standing: 224-2879

Doug Richardson recently appeared in the Citizen with his Zenith CH250. He reported that the reporter was quite keen on this type of thing and perhaps it is a good way of advertising the Club. He has a 320 Lycoming engine to put in the plane but is considering an auto engine conversion.

Ken Cavers is building a C-61 Czech, a low wing mono.

Alex Fulton is building a Starlite.

It was proposed that a list be prepared of who has what stock of bits and pieces, what expertise exists in the Club, what tools are available and who owns what aircraft or is building what. This will be looked into by the Executive Committee.

Eric Taada noted that a static thrust test can be done using the Club's weighing scale as a tensionmeter.

NOTES FROM THE EXECUTIVE MEETING, OCTOBER 2, 1986

Good News - there will be no rate increases for '87, the 1986 rates will apply. Join now before there is a tax increase.

The 1987 WCAA Air Show will be a two-day affair and a Committee has been chosen.

President: Girvan Patterson
Vice-President: Gary Walton (of REACT)
Treasurer: Ben Loiselle
Secretary: Garvin Boyle
Program Director: John Rodney
Head of Safety: Derwin Hunt
Charge of Grounds: Eric Taada
Aircraft Parking: Jim Butler
Activity Involved: Doug Richardson

NEXT MEETING

October 17, 1986

8:00 p.m.

NRC, Sussex Drive

Doug Laurie-Leen has a 25 min. Video on the new 5 blade solid rotor heli-copter by Rotoway.

Also he will present his Oshkosh paper titled "Amateur Built Helli-copters"

19 September 1986

NOTES ON TALK BY ANDREW RICKETTS

KB2 GYROCOPTER

Andrew began building his Ken Brock 2 (KB2) gyrocopter in his basement in January 1985 and completed the assembly in his garage in May of this year. A "designee" inspection was done at this time and resulted in some cable changes and a suggestion that tests be done on fuel flow and carburetor temperature. Andrew did a lot of instrumentation on the carb. to prove carb. heat wasn't needed. He found the Venturi temp. was always 5° above ambient. The effort was wasted however. There was no ruling available on the requirement for carb. heat or a firewall but when the first DOT inspection was done on July 8th the inspector insisted on carb. heat (was not interested in the results of the tests done on carb. temperature), and a firewall. The DOT inspector insisted that unless it went off somewhere for analysis he couldn't fly it. Andrew installed a carb. heat - it's the only engine of this type (in use for 20 years) in North America with a carb. heat! As for the firewall, Andrew suggested he'd have to fly backwards before he'd need the protection, but he complied with the inspector's wishes. Andrew managed to get DOT to do a final inspection (Aug. 29th) after threatening to bring the gyrocopter to the DOT offices!

Vital Statistics

Length: 11'3"	Width: 5'8"	Height: 6'8"
Empty weight: 250 lbs	Max. Gross: 600 lbs	
Top speed: 90-95 mph	Cruise: 70-75 mph	
Take-off dist. (sea level): 200-300 ft.	Landing roll: 0-20 ft	
Max. Altitude: 10,000 ft plus		
Fuel: 8.9 gals US	Range: 150 mi	
	Endurance: 2 hrs	
Take-off speed: 20 mph		Rate of Climb: 1000-1500 fpm

Engine

2 stroke flat 4 air cooled McCulloch 4318 "6X" (originally designed as a target drone engine).
Rated at 90 HP at 4000 rpm
Displacement 100 cu.in. Dry weight: 77 lbs
Static thrust is 250-300 lbs

Rotor

Diameter 22 ft, Chord 7 in
Disc loading at max. gross is 1.58 lbs/sq.ft.

History

The gyrocopter was first invented in 1923 by a Spaniard - Juan de la Cordova. It was first flown on January 9, 1923 at the Getafe Aerodrome near Madrid. Apparently it kept rolling over - five flights were made before the solution was found - an articulating head.

In 1931 Pitcairn landed and took off from the White House lawn which ultimately lead to the presentation of the Collier Trophy by Herbert Hoover to the manufacturer, Harold Pitcairn. In April of 1931 Amelia Earhart set an altitude record for gyrocopters of 18,000 ft.

In the early 1950's, Igor B. Benson, who worked with G.E. founded Benson Aircraft Corporation, and went on to earn twelve official world records with the Benson B8 gyrocopter.

Sport Aviation in 1981 featured the gyrocopter noting it to be the most popular homebuilt (837 registered).

Although the gyrocopter has a reputation for being somewhat accident prone, this is not quite true. An Aviation Safety Consumer Newsletter (NTSB and FAS) noted 28 accidents out of a total of 722 gyrocopters registered at the time (3.88%). This compares with 357 accidents out of all 9,094 homebuilts registered at that time (3.93%) and 12,616 accidents out of 2,250,956 general aviation aircraft (5.60%). It should be recognized also that the average homebuilt pilot apparently has about 2,000 hours of flying time. The average gyrocopter pilot reportedly is operating on a student licence.

Andrew noted that obtaining some of the material was tricky. He went through Dave Drane in Oshawa (Grassroots Aviation) who was very helpful. The rotor head, blades, gas tank (pilots' seat - \$225 U.S.), wheels and engine mount were bought ready built.

HOW ABOUT
YOUR
'AD'
PLACED HERE?
IT'S FREE!!

TECHNICAL TIPS

by

Garry Fancy

BATTERY INSTALLATION

The first thing that comes to mind after the position of the battery has been determined is to anchor it securely to the airframe, particularly if it is behind the pilot or passenger. In the event of an accident, the battery, because of its inherent mass, has a great propensity to come adrift. Imagine trying to stop whis with your backside! So anchor it very well and install it in a good strong container with a securely held top.

The other main point, I guess, is to ensure the possibility of a short circuit is as remote as possible. Wherever possible, mount the master solenoid and particularly the starter solenoid on the battery box. This reduces the possibility of a fire due to short circuit, particularly in the event of an accident. Ensure that the positive leads are well covered and protected against chaffing.

I have found that an excellent battery strap can be made from Dacron fabric - it is impervious to battery acid for one thing and plenty strong enough.

On the subject of auto batteries for aircraft use, I have found auto batteries quite acceptable for aircraft use. They can be made acceptable for inverted flight by installing the aircraft anti-spill plugs or perhaps by using the newer maintenance free batteries.

10 WAYS TO KILL AN ORGANIZATION

1. Always have something else to do when there is a meeting.
2. If you attend a meeting, be sure to find fault with the officers and fellow members.
3. Refuse to hold office, as it is easier to criticize than to be criticized.
4. Get sore if you are not put on a committee.
5. If you are put on a committee, don't do the job.
6. If the chairman asks for opinions, by all means keep silent, but later tell others what should have been done.
7. When a few fellows roll up their sleeves to help things along, preach that a clique is running the organization.
8. Stick to telling what you have done in the past for an organization, never look to the future.
9. Delay paying your dues as long as possible or don't pay at all.
10. Never bother about getting new members - let "someone" do it.

BOX 18 UPDATE of EAAC

1986-SEPT

THIS IS the first in what is hoped will be a monthly information update to the chapters from EAAC headquarters.

DURING THE week of August the 24th the executive were able to make a trip to Ottawa. The main purpose was to confer with Peter Roberts and other members of the DoT technical staff concerning the use of Auto fuel in licensed aircraft. As gasoline represents only about three percent of the fuel used in aircraft in Canada, the DoT people are aware that its continued availability may become a real problem in the future. EAAC presented a plan to have autofuel and aviation fuel tested in parallel and are presently waiting for DoT's reply.

WHILE IN Ottawa your executive also made courtesy calls on our sister organizations COPA and CASC. It was a whirlwind trip but well worth while.

WE RECEIVE letters. Of course most of these ask about EAAC and are applications for membership. Others are requests concerning forming an EAAC chapter or including EAAC in the charter of an existing Canadian chapter. One letter we received was from EAAC Chapter 4907 of Brandon Mb. It outlined their recent activities and their plan for welcoming Carl Hebert during his "Gift of Wings" flight across Canada: a very active chapter indeed.

THERE ARE technical queries too. What is brand new and high tech for a first time builder may not mean much to the old hand but it receives the same careful response. EAAC Vice-president Maureen M'Graw fields these technical questions and passes them on to which of the Research and Development people can best answer. EAAC is fortunate with this group. They are all experts in their respective fields and all have the endorsement of DoT.

CANADIAN designers have unveiled three new aircraft this summer. Chris Heinz of Zenair had his new CH 701 Stoll at Odhkosk and Drillia. It is typical of all Zenair designs by being all-metal. Ron Mason had his four place Christavia at Drillia. It is a tail dragger of cloth, tube, and wood construction and has outstanding performance with its 100 hp. Jean-Rene Lepage has received good report on his Ultravia Club Pelican. It is one of the first Canadian designs with a fibreglass and foam fuselage. Peter Garrison writing in the September issue of Flying is very hard on the plastic plane of the month craze that is sweeping the homebuilt scene south of the border. His advice is "Buyer beware" and then some. We are fortunate in Canada where we enjoy a more thoughtful and cautious approach.

LIABILITY AND INSURANCE are topics to which every Canadian chapter gives thought. At present EAAC is conferring with Canadian experts in this field and it is intended to have a policy available to our chapters in the near future.

THIS LETTER has been mailed to the Chapter secretary but if your chapter elects a new secretary with a new address this fall and I do not receive the information until next spring your chapter will miss several BOX 18 UPDATES. So this is a plea for your chapter to have a permanent mailing address. A PO Box or a place of business or something of that kind is what I have in mind. Something that doesn't change, anyway.

UNTIL next month;

BILL WEIR, Secretary.

CANADIAN

summary
Dobkrohn

... have unveiled these new...
... of Janic had...
... It is typical of all...
... Ron Mason had his...
... will dragger of...
... outstanding performance with its 100...
... has received good report on his...
... It is one of the first Canadian...
... and four...
... issue of...
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