

CARB HEAT

Newsletter of the Experimental Aircraft Association Chapter 245
Ottawa, Ontario, Canada
Volume 51 No. 2 October 2021

Our Next Meeting - Elections

SPEAKER TOPIC: Ottawa to Steinbach, Manitoba & Return
by Gyrocopter

PRESENTER: Andrew Henry

WHEN: Thursday, October 21st, 2021, 7:30pm

WHERE: Virtually, via Zoom on-line meeting

Check your email in-box for a meeting invitation to be sent by our Chapter President.

(it's not hard at all to join a Zoom meeting – try it, if you're having trouble, contact one of the execs who will help you out)

Important Chapter News

Unfortunately, COVID-19 is still with us in the form of new variants (Delta, Lambda) and these remain cause for concern. Our Chapter hangar remains open however, gatherings remain under the restrictions imposed by provincial and local health regulations. Two metre spacings are required indoors and outdoors if unmasked and, ideally wear a mask indoors in any case.

Please stay tuned for updated guidance from our President and Operations Manager as the situation evolves.



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Executive Roundup

• Editor's Comments

Peter Whittaker – EAA Chapter 245 Newsletter Editor



Hello EAA 245,

Here is your first newsletter from me after taking over from Mark Briggs. I will certainly aim to keep up the standards that Mark set and keep the chapter news flowing. Thanks, are also due to the contributors to Carb Heat, otherwise there would be no news or items of interest to pass on.

The Newsletter should be a forum not only for the Executive Roundup but, also for members in general to inform the rest of the crew about you have been up to. A photo and a few sentences can be very informative. If you have been anywhere interesting with your aircraft, have a great scenery shot, found a secret grass airstrip, any of this is worth passing around.

My personal interest is in airplane building and flying (to make sure all the parts stay together) so news or updates about whatever aircraft project you are working on is excellent material for Carb Heat. I am now flying my scratch built Zenair CH601-HDS which took me 13 years to get airborne and I made lots of mistakes along the way and made many parts two or three times over but, that is part of the learning (sometimes slow learning) process. With that in mind, having experiences from builders within the chapter and tips on how to do things better would make excellent material for Carb Heat.

Keep on building and flying,
Peter W

• President's Message

Mark Richardson – EAA Chapter 245 President



Hey everyone,

Welcome to Autumn! It is hard to believe that the summer has whipped by already. I didn't get anywhere near as much flying in as I wanted to. Of course, we are still in the grips of the pandemic so the \$100 hamburger trips are somewhat more problematic given not all airport restaurants are open/still in business. My wife and I flew to Mont Laurier one Sunday morning for breakfast only to find the restaurant at the field is no longer open for breakfast (just lunch and dinner). Thankfully we fly a small pickup truck (Maule M5) and had loaded our folding bikes just in case. We pedaled the 6 or 7 kms into town and had breakfast at a real sit-down restaurant. COVID has really put a damper on a lot of our chapter activities. Not only have we seen periods of months where we couldn't gather at the hangar for work on the Zenith, our annual Young Eagles day and Chapter Fly-in Breakfast has had to be cancelled...again! I really miss the big days at the chapter for events like this and am really, really hoping next year will be closer to normal.

The next general meeting for the chapter is on Thursday 21 October and, yes, it will be a Zoom meeting again. Sorry. The aviation museum is not open for gatherings and there are still provincial restrictions on gathering size. I would implore you to attend this next meeting for two reasons; first, our own Young Eagles coordinator Andrew Henry is doing a presentation on flying to Steinbach, Manitoba.... in a gyrocopter! An epic trip in a small aircraft any way you slice it, but in a gyrocopter it just seems so much more daunting.

The second reason I really need you to attend is that it is chapter election night (I can hear some of you snoring already). Our chapter by-laws state we need a 25% attendance at a minimum to form a quorum. That means at least 26 or 27 of us need to attend for the results to be valid.

This year, the following positions are up for election:

- Vice President (incumbent Mike L)
- Secretary (incumbent Mark C)
- Membership (incumbent Phil J)
- Newsletter (incumbent Peter W)
- Young Eagles (incumbent Andrew H)

If you are interested in any of these positions, or want to nominate someone, please send that information to Martin Poettcker (Martin.Poettcker@marpoe.ca) as soon as possible. That's it for this issue.

Mark

• **Vice President**

Mike Lamb – EAA Chapter 245 Vice-President



Hi All,

Spent a little time on the ramp at Arnprior, two boxy aircraft and a fat round one. Was nice to see the rain clear out. With the fall colours in full bloom, it is a perfect time to take a flight for some sightseeing. So, go enjoy.

With the prospect of cold weather flying soon to be upon us, it is time to get yourself and your aircraft ready. Get your winter kits prepped and ready for installation. Also, time to start dressing for the weather. You never know when you might have to walk back to civilization.

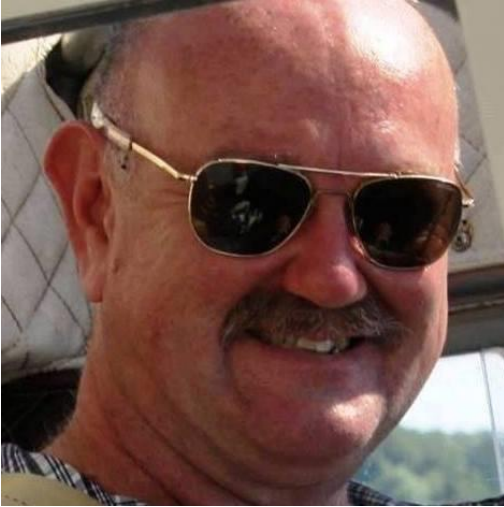


Although, when briefing passengers, I always say that you never know when the heater might fail. Proper footwear is very important. Feel free to fly without your jacket but, please put it in the aircraft. A jacket in the car is like the runway behind you, not much good for anything. So, stay safe and enjoy some flying.

Mike Lamb VP

- **Treasurer and Marketing Manager**

Ken Potter – EAA Chapter 245 Treasurer & Marketing Manager



Hello Everyone,

While the pandemic has been hard in many ways, EAA 245 is staying the course. Membership and tiedown revenues have remained strong. We again had to cancel our Fly-In Breakfast in September out of an abundance of caution. We typically serve 300 + breakfasts and have 200 others come from the local community just to experience the airport and airplanes. We did not feel comfortable managing this within the local restrictions in place.

One bright spot has been our fundraising to buy an Automated External Defibrillator (AED) for the Chapter facility. The Chapter executive recognized that the demographic of the members (yes, that means we're getting old) indicated that there is an increasing risk of someone have a cardiac arrest at our facility or anywhere on the airport. As a consequence we began fund raising through donations at the August TC recurrency seminar, and in September at the Chapter BBQ. To date, due to the generosity of members and visitors we have raised almost \$ 1000 towards the purchase of an AED. We're within reach of our goal of \$ 2000 so if anyone would like to donate (hint hint) please send an e-Transfer to treasurer@eaa245.org. Every little bit counts to save a life.

Cheers,
Ken

- **Secretary**

Mark Cianfaglione – EAA Chapter 245 Secretary



Hello Everyone,

As our second COVID summer comes to an end and the fall begins I want to remind everyone to keep up the health precautions. So far so good.

As the self-appointed, part-time EAA245 workshop inspector I want to thank everyone who has been using the workshop and the machine shop for cleaning up and especially putting the tools away in their proper places. I'm no Marie Kondo (look her up) as I still have some disarray in my own shop but, I do feel a lot less stress when I go to the Chapter 245 shop and I can find things in their proper places. As well, a less cluttered work area is also a safer area.

A reminder that if something breaks or you see something broken, please tell John (ops@eaa245.org) so that we can replace/fix it. There's no shame in mistakes. After all they are truly the only things we can really call our own. I'd rather buy a new tool than cause a potentially lethal accident for someone else.

Mark C.

- **Operations**

John Montgomery – EAA Chapter 245 Operations



Hi All,

I have a problem. I am a procrastinator. I especially seem to have a hard time getting things started. For example, shedding those extra Covid pounds so I can fit in an airplane or writing this ops update! My apologies to our newsletter editor for my tardiness.

Thanks for Phillip Johnson for leading the charge in getting our weight and balance scales up to snuff with new batteries and power supplies as well as Mike Lamb for running them out to the certification shop. This specialized tool is a perfect example of the advantage of being an EAA 245 member. This maintenance and certification is required every few years which is why we need to charge \$20 for use of the scales. Please make sure you pay the chapter every time you use the scales.

Over the past few years, the chapter has rented space in the chapter hangar out to chapter members over the winter months. We plan to continue to offer space this year as well. Note that the chapter's 750 Cruzer project already takes up a portion of the hangar so larger aircraft may not fit this year. We want the hangar to still be available for members so any winter renter must be willing to move outside for a day or two in case any chapter member requests to book the hangar for needed maintenance. The chapter executive still needs to finalize the monthly rate for this winter, but if a member is interested in space this winter, please contact me.

On the note of the Cruzer project, I see that the Cruzer team is continuing to plow ahead with the project. I have to say I am very impressed that they steadily make progress. We are preparing for the colder winter months. The east end of the chapter lounge now has a workbench to start the Cruzer engine work. Please try not to touch anything in this area without first checking with the Cruzer team.

EAA chapter 245 aircraft tie down spaces are available only to chapter members and we require the renters to agree to the terms in our tie down code of conduct document. Mostly the document lists off common sense and "be a good neighbour" items, but it also requires that the renter provide proof of liability insurance. This policy will be more rigidly enforced in the new year for our tenants. Contact myself or our membership coordinator for more info on this.

We recently installed new front tires on the chapter tractor. Thanks to Amazon it was cost effective to buy new wheels vs the hassle of mounting new rubber. I am mentioning this in this update because the new wheels have grease nipples where we cannot easily see them on the inside of the rims and we will need to remember to periodically add grease.

We soon need to start our fall maintenance. For example, changing the oil in the tractor, cleaning the mower deck, adding grease to the wheels and mower spindles, etc. Last winter I noticed our snow blower carb was leaking fuel. We should look into this while it is still relatively warm in the hangar.

I see that a couple of members expended quite a bit of effort and cleaned up the shop. Thanks guys! This warmed the cockles of my heart and gave me hope for humanity 😊. I really need to impress on the members that we all need to help keep our facility in good shape. I would ask that people who change their oil or perform maintenance to please take away and dispose of the used oil, filters, and garbage you produce. I would also ask every member to occasionally take away a bag of garbage or recyclables for disposal.

I would ask that people not randomly “donate” old books or items to the chapter without checking with the executive first. We just do not have a lot of room, so we need to plan. For example, someone just dropped off the seat from some aircraft in front of the hangar earlier this year – and there it just sat for the next month until I relocated it to our junk pile. Speaking of which we need to do a landfill run soon. If anyone wants an item from the pile let me know! I love the sense of community we have at the chapter hangar. We all try to help each other out. Let’s keep building on that. See you guys at the hangar!

See you at the hangar,

John M.

- **Membership & Webmaster**

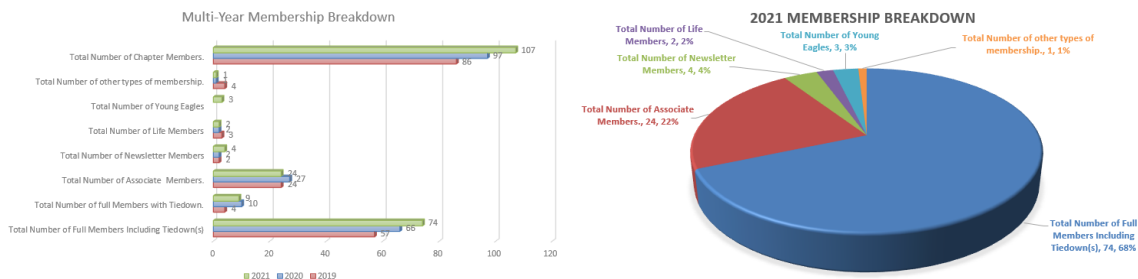
Phillip Johnson – EAA Chapter 245 Membership Coordinator AND Webmaster



We are reaching the end of 2021 and hopefully we will find COVID behind us so we can be doing some real aviation. This year has been a bumper year as far as new memberships. We lost five members, but we gained fifteen new members, so we are ten up on last year. Hopefully, we will see even better membership in 2022. Our membership prices have been

unchanged for a good many years and there has been no discussion on making any increases in the foreseeable future. If we continue to grow as a chapter, we can hold off these increases and our income comes primarily from our membership dues. The executive thanks all its members for their continued support.

As usual the graphics below show the membership at the end of 2019, 2020 and at October 2021 with the following breakdown:



As a result of some comments from Charlie Becker at EAA headquarters, they are looking to see how many members of various chapters are members of EAA in Wisconsin, and they have found that chapters are quoting memberships greater than they are supposed to be reporting, and we have been asked to track responsibly. Remember, our insurance is only valid for EAA members. You may have noticed that I have been asking for your EAA number in the recent past. This number is used to track your membership status with EAA. We have now discontinued the Newsletter membership and all members are required to be members of EAA in Wisconsin before they can be a chapter member. This is nothing new, it has just been tracked very poorly in the past. It may become mandatory for chapters to adopt Charlie Becker's Roster management tool in the future if we do not clean up our act. This is not just Chapter 245 but all chapters worldwide.

On the personal front. I've managed to get some good flying this year, but I did not manage to make Airventure as I had planned. I had scheduled to fly the Cozy to Oshkosh, and this would have been the first time for me doing that. I was also scheduled to give a Cozy presentation in the Canadian Tent and have the Cozy parked, nose down, on the grass just outside the tent. That too fell by the wayside. Perhaps 2022 will be more forgiving.

As many of you know, I am now on the EAA Canadian Council as the Chapter Liaison guy so if you need anything from the council, please let me know. I have also been promoted to EAA Tech Counsellor with specialities in Composites, Automotive engines, and Electrical. If you want expertise in building an RV don't come to me as I'm not your guy, but in case everyone has forgotten, I am the Technical Information Officer (TIO) for the chapter so if you need some technical information, please come to me and I'll see if I can help you out. I may not have the knowledge, but I can definitely help you out in doing the research.

Webmaster Report (Chapter 245 (eaa.org):

You will notice the home page Chapter 245 (eaa.org) is now changing every month with the main message being the expected subject matter for the next general meeting plus a thank you for the previous presenter's presentation. I have also tried to include fly-in events from other Canadian organisations, that are within reach of chapter 245, on the right-hand side of the home page.

The Event Calendar (eaa.org) is also active so please check this out to see what is coming down the pike. I did give a detailed description of everything in the last newsletter, but I think the biggest change is under the newsletter tab. I have managed to secure back issues of Carb Heat going back to 1972, although these earlier newsletters are pretty sparse. A big thank you to Russell Holmes, Wayne Griese, Yvon Mayo, and Colin McGeachy for all of those back issues.

I have previously asked that members send me a high-resolution photograph of their aircraft they currently own. Not something they used to own or would like to own but what they own today. I would also like just one sentence to add to the photograph. The purpose of these pictures is to show potential members, what we are building/flying and who's doing what. It is attractive to the potential member when he sees other members have the same aircraft. For example, I have an aviation friend who did not join EAA because it was only for homebuilders. Now he is a member. If your aircraft is a project and we have a picture of it on these pages, can you please send me an updated picture as the project moves forward.

On a last note, some of you may remember that I received the Oshkosh award for the best EAA website for 2021. Pictured below is the plaque I received for winning this. Since EAA feel we have such a great website, it behoves our members to check it out at Chapter 245 (eaa.org). The website changes every couple of weeks so please keep going back to it for updated information.



Remember, this is your website so if anyone has additional requests on what is needed from a chapter website, please contact me at Membership@eaa245.org .

Phillip Johnson

- **Young Eagles**

Andrew Henry – EAA Chapter 245 Young Eagles Coordinator



Hello Membership,

I am writing to you all for the first time as the new Young Eagles Co-ordinator. First of all, thanks to Mark Briggs for his many years of overseeing this program and for his enthusiasm in engaging our young people in the same passion that we all have for aviation.

The past two summers have put a damper on the Young Eagles program but, I want you to know that it is alive and well. Although restrictions have prevented us from holding any significant events during this time, a handful of youngsters have had the chance to fly. Thank you to the members who made that happen!

As we look towards 2022 we are planning to take this winter to define plans for an epic return to the skies. With the next newsletter we will be announcing two dates for Young Eagles events: one in late Spring, and one later in the Summer. We are also preparing for 'ad hoc' opportunities as well.

For all of you aircraft owners who would like to see wide smiles on kids' faces, please consider putting your names in to participate. I'd really appreciate knowing even now who's shoulder we can tap for when the time comes. Of course, this is just an initial expression of interest; the dates, everyone's schedules, serviceable aircraft, and weather will all play a factor as the dates approach. So, for now, just let me know if I can pencil you in.

Thanks,
Andrew Henry
Young Eagles Co-ordinator
EAA 24

MEMBER ARTICLES

Mark Richardson: Rudder Trim Mechanism on the Bearhawk

As many of you know, I am currently scratch building a 4 place A model Bearhawk and I am always looking for both cool ideas and “things to avoid” during my build and am trying to incorporate those that will prove to be handy but not compromise the engineering of the design nor add significant weight. One idea came from my Maule M5-235C that I am flying until the Bearhawk is done.

I have found the rudder trim in my Maule (such as it is) to be really useful, especially on long climbs. However, depending upon speed I have had to fiddle with the setting to get things where I’m actually flying straight. If you aren’t familiar with the Maule rudder trim, it is essentially a handle you tug on that just pulls on your right rudder pedal with a spring. Dead simple. Also, right rudder trim only.

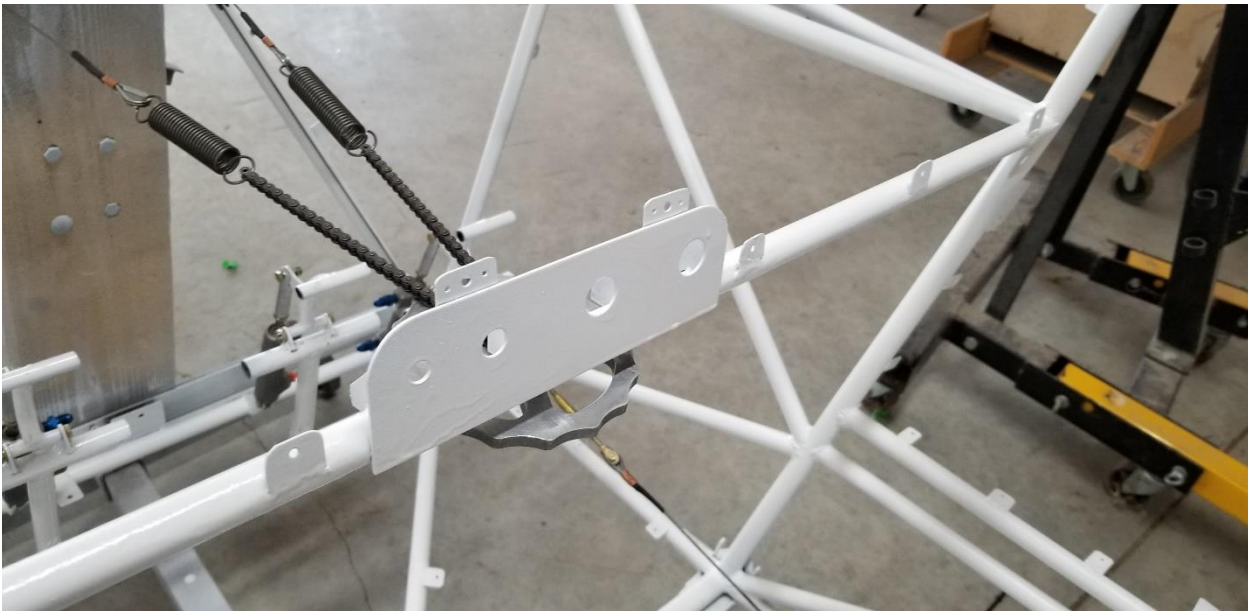
Since I am putting an electric elevator trim in my 4 place (actually, a G3X system with Autopilot and Yaw Damper), I had the elevator trim wheel left over. Since I really don’t want to have an ugly rudder trim tab sticking out the back of the airplane, nor do I want to be trimmed for only one speed (unless I have built everything perfectly straight...not likely since this is a scratch build) I thought I would try and design and build a rudder trim system that is completely adjustable.

The rudder pedals on the Bearhawk require return springs so they don’t fall over onto the floor when your feet aren’t on them so I figured I would use those springs as part of the rudder trim (like the Maule, but for both directions). The elevator trim wheel has a sprocket and comes with a chain, so if I could manage to mount the wheel in an unobtrusive place but still have easy access to it, that would be ideal.



Here you can see where I just welded on an .063 4130 tab directly underneath the throttle quadrant (which is a welded plate so that I can remove the panel without removing the throttle/pitch/mixture). The friction of the wheel will be set by a magical combination of washers,

castlenut position, and just the right amount of tongue sticking out as I tighten the whole thing up and install a cotter pin.



This is the view from the panel side. Very easy to access and not too unsightly. The trim wheel is attached to the rudder pedals through the rudder return springs, which in turn are connected through some 1/16" galvanized cable, pulleys, and shackles. There are two 1.75" pulleys for each side and they are oriented to run the 1/16" cable down the tube to a point just forward of the rudder pedal return spring arms.





This last picture shows the connection to the rudder pedals themselves. This was the biggest issue when I was designing how the system would work. Originally, I had the pulley farther down the tube and the shackle was on the return spring arm itself. The problem was that the thimble and swage now interfered with the pulley. A friend suggested an offset connection of some kind, so I made the 4130 plates you see here and used a long bolt with the shackle to make the connection.

The system seems to work quite well but I will only know for sure once the aircraft is flying ... which be Tuesday ... I'm just not which WHICH Tuesday....

Peter Whittaker: Anatomy of a Used Bing CV94 Carburetor

Introduction

The Jabiru 3300 engine that was acquired by EAA Chapter 245 to be used for the 750 Cruiser building project was taken apart for inspection and is pending a rebuild. The carburetor that is matched to the Jabiru 3300 engine by Jabiru is a Bing 94 CV (Constant Velocity) model also referred to as an altitude compensating carburetor. This type of “carb” precludes the necessity for mixture control and hence the engine controls consist of throttle and choke only. Since the engine was acquired from a crashed aircraft it was decided to have a close look at the carb considering that there was external damage visible. The following description may help to determine if Chapter 245 wishes to refurbish this carb or purchase a new one. The outcome was that the Chapter purchased a ROTEC throttle body injection unit made in Australia for the Jabiru 3300 engine.

Summary

External damage on the carb body included a sheared mounting tab for the control cable bracket, a bent control cable bracket, a chipped rim on the mixture outlet at the butterfly valve housing and a slight dent in the base of the fuel bowl. After cleaning, a hairline fracture was noted at the base of the housing for the slow idle adjustment screw. The housing separated with a few taps of a hammer. Since this housing is integral to the main carb body casting, a new carb should be acquired. An older repair was noted where either a hole or a fracture had been welded. However, the carb had been in use for some unknown length of time since the weld repair had a dull grey oxidised finish similar to that on the main carb body. The separated parts and the chip out of the rim were temporarily fixed with “JB Cold Weld” epoxy.

Internal defects included a 4 to 5 mm diameter patch of corrosion in a bottom inside corner of the fuel bowl. The inside of the weld repair, in a zone traversed by the butterfly valve, was noted to be porous.

Bing 94 CV Carburetor (Carb)

The carb was removed from a box of engine parts for cleaning and inspection and still had the old throttle and choke cables attached (Fig.1).

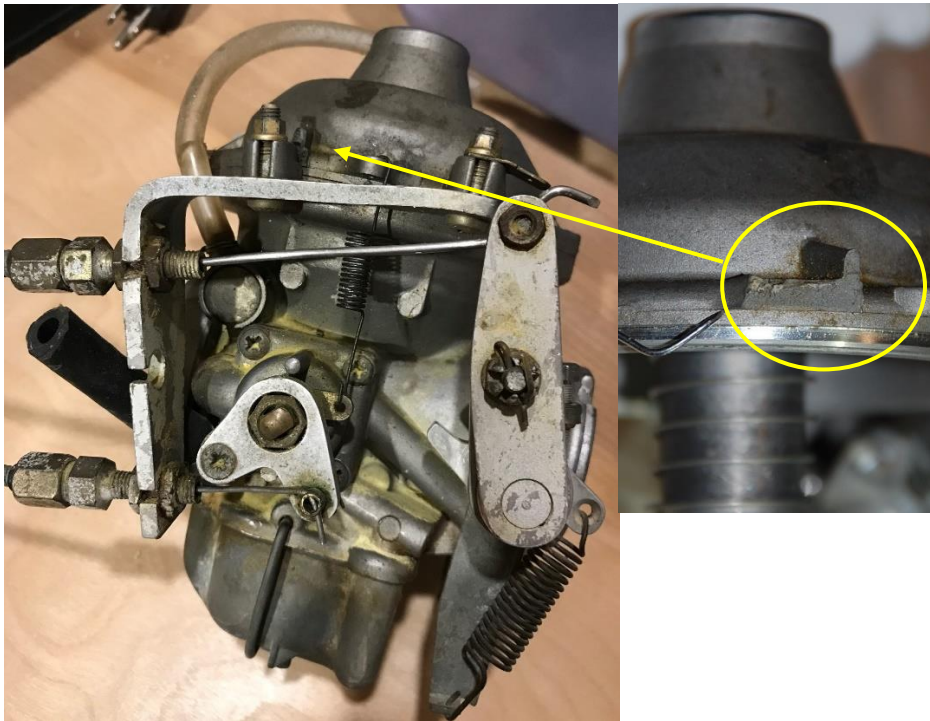


Figure 1. Bing carburetor as removed from the box of engine parts.

In Figure 1 the bent cable mounting bracket is evident, it should be at 90°, and the left bracket mounting tab is sheared from the dome cap of the carb (yellow circle/arrow). The upper cable is the throttle, and the lower cable is the choke. The throttle cable is attached to the Jabiru throttle arm extension with tension applied using the spring that is attached from the bottom of the main throttle lever to the bracket (also slightly bent) at the bottom of the photo. The choke has tension applied by a spring that connects to the base of the dome cap. The bent cable bracket is made of soft aluminum and was bent back to 90° using a bench vise.

The rim on the exit side of the carb at the butterfly valve housing was damaged with a 7 to 8 mm fragment removed (Fig.2). This defect is at the rim where the short hose connects the carb outlet to the manifold intake. The fuel mixture is divided into 6 streams, one for each cylinder intake at the manifold.



Figure 2. Carb outlet rim with a sharp-edged chip (yellow circle) which would need to be filled and smoothed out.

A previous repair had been made by welding either a hole or a fracture (Fig.3). This was done some time ago to allow for development of the oxide layer tarnish on the weld to almost match that of the tarnish on the aluminum casting of the carb body.

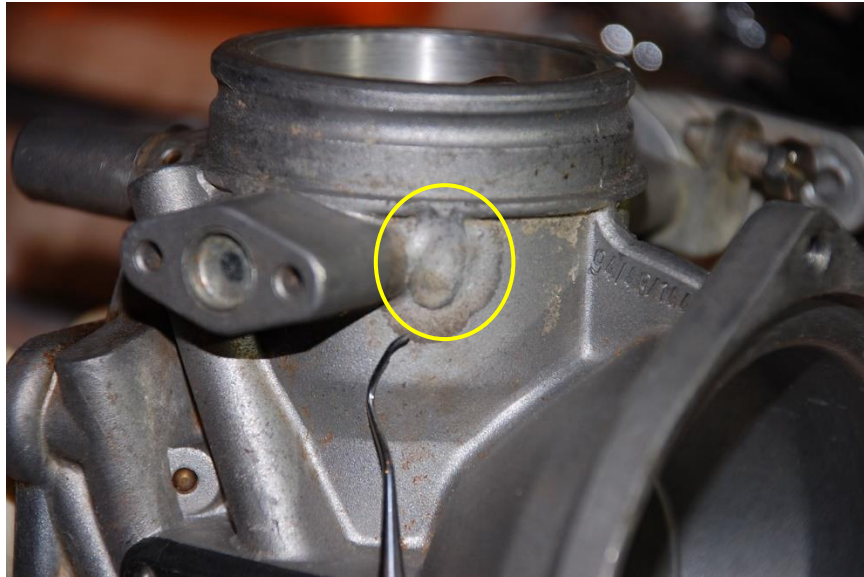


Figure 3. Previous weld repair to the carb body (yellow circle).

The interior of the weld repair is porous (Fig.4 – yellow circle) and sits within the range that the butterfly valve swings across going from full to closed throttle. The weld has been ground smooth and the butterfly valve moves smoothly across the porous welded surface.

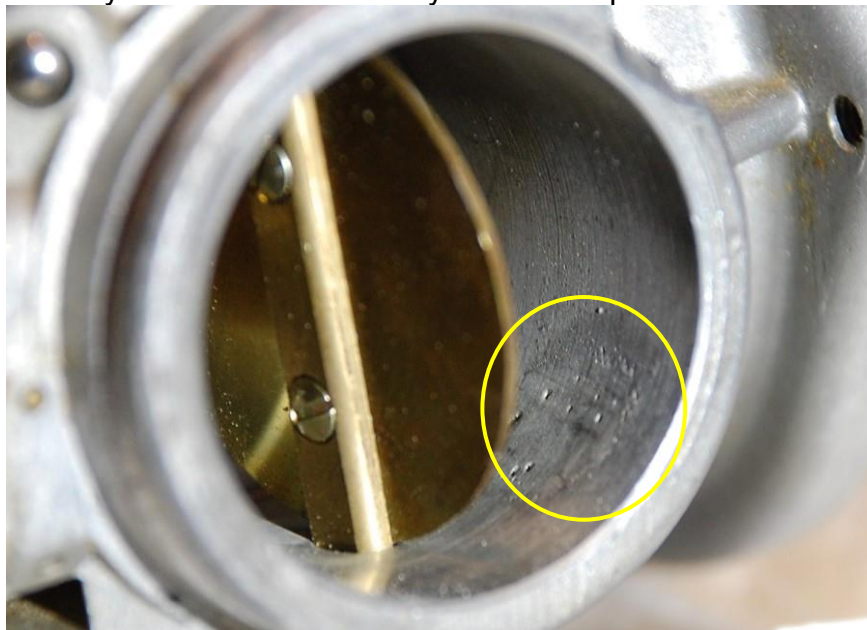


Figure 4. The yellow circle encloses the porous weld which is within the travel of the butterfly valve (brass disc).

A hairline fracture (arrow) at the base of the housing for the slow idle adjustment screw was noted after cleaning. A dent at the entrance rim of the housing was also present and had to be filed back to allow removal of the idle adjustment screw. It is likely that the dent is related to

the hairline fracture. A few taps with a hammer caused the housing to separate along the hairline fracture. The housing was cemented back into place using “JB Cold Weld” epoxy (Fig.5) however, this should only constitute a temporary repair.

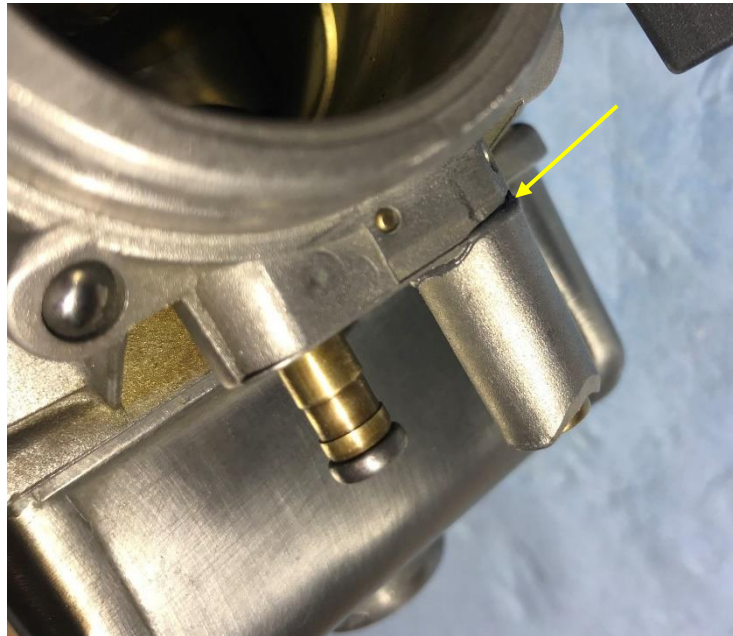


Figure 5. Fractured housing for the slow idle screw epoxied back into place.

The fuel bowl has a shiny but minor dent in the bottom (Fig.6) from a recent impact. The dent, less than 0.5 mm deep, has not made any substantial change to the shape or capacity of the bowl. The interior of the fuel bowl exhibits corrosion in the form of a 4 to 5 mm diameter grey-white powdery patch (Fig.7). Corrosion had only developed on the surface, and this was polished off.



Figure 6. Recent scratches and a minor dent (less than 0.5 mm) are found on the bottom of the fuel bowl (yellow circle).



Figure 7. A corrosion patch, 4 to 5 mm in diameter (yellow circle) and just on the surface, has developed in a bottom inside corner of the fuel bowl. This could reflect collected water that sat after fuel had evaporated. The corrosion product was easily removed by scraping and left a smooth, unpitted, surface.

A general view of the carb, upside down and with the fuel bowl removed, shows the cork gasket, the fuel floats (white) and the main fuel jet (Fig.8). The main jet sits at the bottom of the column of jets into which the jet needle slides up and down to regulate fuel flow and mixture. The cork gasket should be replaced. The floats are intact and move freely on their hinge and spring mechanism. The floats were checked and confirmed to be level by reference to the gasket rim.

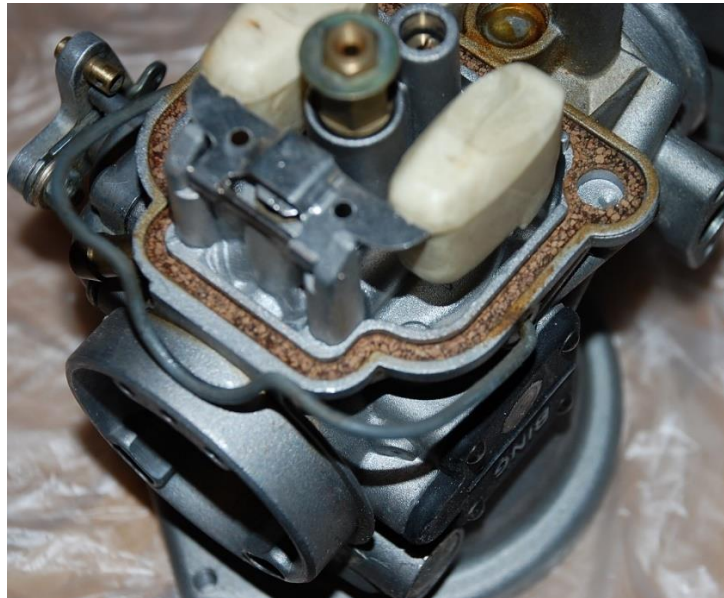


Figure 8. Bottom side of the carb with the fuel bowl removed to expose the cork gasket, the white fuel floats and the main jet assembly (hex nut with greenish washer at top centre).

The disassembled carb (Fig.9) shows the dome cap and coil spring which applies pressure to the piston/needle and diaphragm assembly. The needle slides up and down in response to changes in throttle setting (engine vacuum) and outside air pressure to regulate fuel flow and mixture.



Figure 9. Carb components and straightened cable attachment bracket.

The choke or enricher assembly and the throttle assembly were removed and cleaned (Fig.10) and this allowed for improved access to clean the main carb body.



Figure 10. Disassembled choke (left) and throttle (right) assemblies were cleaned prior to reassembly.

The piston and needle assembly were in good condition as was the black diaphragm which makes an airtight seal between the upper carb dome and the lower portion of the carb body (Fig.11). The float assembly is shown with the fuel shut-off needle (1), the low idle screw (2), the accessory vacuum line blanking screw (3), and the column of jets assemble (4). The column of jets from bottom to top includes the main jet with washer and hex nut, the needle jet in the middle and the atomizer at the top (Fig.11).



Figure 11. Carb components that control fuel flow, atomization, and mixture control.

The carb sub-assemblies and main body were cleaned with a scotch brite pad and acetone to remove oxidation and varnish deposits from where fuel had leaked out of the float bowl around the cork gasket. After broken parts and the chip in the mixture exit rim were fixed with epoxy, the carb was reassembled (Fig.12). The throttle (top) and choke (bottom) cable clamps were attached to the 90° bracket which was straightened. If nothing else, the carb can be used for future demonstration purposes. The yellow lines trace out the cable connections to the throttle arm and the mixture control.

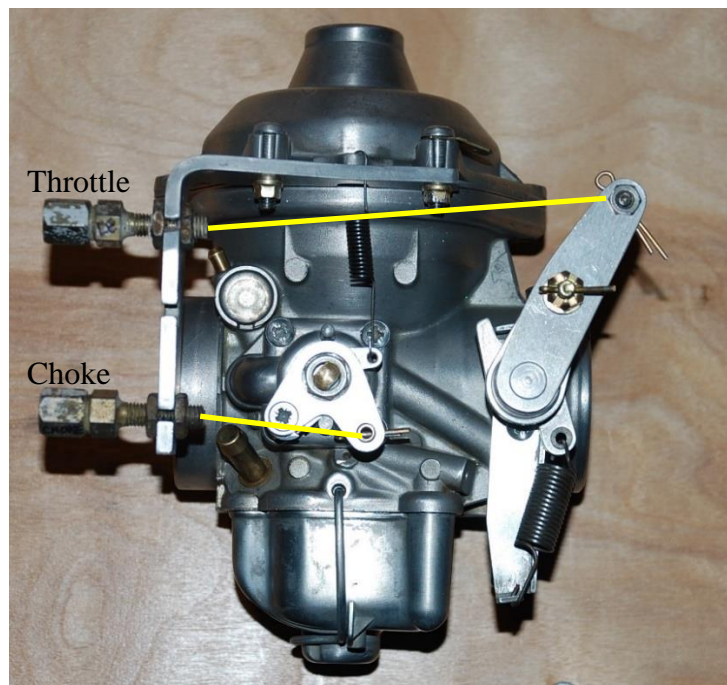


Figure 12. Cleaned and reassembled Bing 94 CV carburetor from the Jabiru 3300 engine.

Peter Whittaker: Zenith 750 Cruiser Project Update

Progress on the 750 Cruiser has been slower than ideal with COVID restrictions and precautions taking precedence for a good part of this year to date. Regardless, some progress has been made since the hanging of the doors as reported in the last newsletter.

High density foam and a faux leather fabric for the seats was purchased and the foam was cut, shaped, and glued (Fig.1). Once that was done, the steel tube seat frames, the foam and fabric were taken out to Mike Asselin in his hangar at Arnprior airport. Mike has kindly offered to finish the seats and sew them together with an industrial sewing machine that he has. Mike has this planned as a fall project.



Figure 1. Foam for the seats was trimmed to the shape of the seat backs and seat bottom trays. Additional side pieces of foam were cut and glued to the seat bottoms (left). Mike Asselin at his hangar in Arnprior with the seat covering project (right) after delivery.

Work inside the cockpit has carried on with the installation of a terminal block (Fig.2 yellow circles) which will take wires from each wing and a common wire will then go forward to the instrument panel (eventually). For example, the port and starboard strobe light wires can then be disconnected at the terminal block when the wings are taken off rather than cut the wires. The wires involved include the navigation/position lights wire, the strobe light wire, and the ground wire from wing. The fuel level sender wire from each wing tank will also connect at the terminal block and from this, the common wires will go forward to the instrument panel. During earlier building, black flexible conduit (Fig.2 yellow arrow) had been installed and this conduit

will take the common wires down and then through the control column – torque tube tunnel forward to the eventual instrument panel.



Figure 2. Terminal block installation (circles) on the rear side of the mid-cockpit upper cross member on the copilot/passenger side. The black conduit (yellow arrow) will take the common wires down and forward to the instrument panel.

Most recently, work has been aimed at the extending the fuel line from the cabin floor at the base of the seat bulkhead forward to the firewall. A compression to hose barb fitting was attached the aluminum fuel line flared end and from there forward it will be flexible rubber fuel line. This will pass through the gascolator and then the fuel shut off valve.

The next stages for this project are the instrument panel, engine and cowling. These are potentially the higher cost items which will be required to complete this airplane. Painting is also another step to be considered and could potentially be done before engine and instruments.

UPCOMING EVENTS

Be of good faith – as our province and neighbouring provinces emerge from COVID lockdowns, this area of Carb Heat will once again be populated with places to go, events to attend and other good aviation happenings.

CLASSIFIEDS

So..... Much..... Emptiness



If you have something aviation-related to sell, or are looking for a particular part or item, drop an email into my in-box at newsletter@eaa245.org or pwhittaker@bell.net and I'll get it posted in our next edition!

WHO WE ARE

Experimental Aircraft Association Chapter 245 Ottawa. We are a group of Amateur Aircraft Builders, Owners, and Enthusiasts with a hangar, lounge and workshop facility located at the Carp Airport, just west of Ottawa.

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EAA 245 Website: <https://chapters.eaa.org/EAA245>

Membership Application and Renewal Form

We have a “Google Group” for the EAA Chapter. If you are not familiar with Google Groups, it’s a service from Google that provides discussion groups for people sharing common interests. If you’d prefer NOT to be a member of the group, please tick the box in the membership application form when you renew your membership.

Experimental Aircraft Association Chapter 245

Application Date: _____

New: _____ Renewal: _____

I do NOT wish to be part of the EAA Google Group: _____



Name: _____

Street: _____

City/Town: _____

Province: _____

Post Code: _____

Phone: () _____

Aircraft Type: _____

Registration: _____

Aviation Affiliations

EAA # _____ Expiry Date: _____

COPA: _____ RAA: _____ UPAC: _____

Other _____

Annual Dues: January 1st to December 31st (pro-rated after March 31st for new members)

Associate Member: \$50*

Full Member: \$100*

Newsletter, hangar, workshop, tie-downs.

*Note. Associate and full members must also be members of EAA’s parent body.

Cheques should be made payable to: EAA Chapter 245 (Ottawa)

On-Line E-Transfers to Treasurer@eaa245.org are preferred.

Note: PayPal payment is available – please consider adding \$3 to cover the fees.