# CARB HEAT

The Newsletter of Experimental Aircraft Association Chapter 245 Ottawa, Ontario, Canada Volume 50 No. 2 March, 2020

### **Next Meeting:**

This is normally where we share the details of our next monthly chapter meeting, details such as who our presenter will be, what their topic will be. Such is not to be the case in this edition...

With the closure of Canada's National Museums and with directives limiting gatherings of people, our Chapter executive has been forced to cancel our meeting for March. This is truly unfortunate as we had an excellent set of speakers lined up. We've put them on hold, hoping they will be able to adjust their calendars once we have the "all clear" to once again hold public meetings. Stay tuned for news about future meetings.

### **Important Chapter News:**

In addition to cancellation of our monthly Chapter meetings, the COVID-19 outbreak has forced us to cancel further group work sessions on the Chapter's Cruzer aircraft project. Compliance with public health directives limiting the gathering of people is mandatory, thus we have little flexibility in this decision. That doesn't mean we can't continue working on the project, but certainly not as a group. Please be very mindful that if you are feeling unwell or have had any contact with a person who is unwell, it would be the better part of valour to refrain from visiting the Chapter hangar and particularly from touching anything at the hangar were the virus may persist on surfaces for several days, leaving an elevated infection risk for others.



### In This Month's Issue:

### Executive Roundup

- 1) Editor's Comments
- 2) President's Message
- 3) Vice President
- 4) Treasurer & Marketing Manager
- 5) Secretary
- 6) Operations
- 7) Membership & Technical Information Officer
- 7) Young Eagles Coordinator
- 8) Webmaster

#### **Member Articles**

- 9) CH750 Cruzer Project Update Peter Whittaker
- 10) The Tale of the Cardinal and the Snow Plow Yvon Mayo

#### **Regular Sections**

- 11) Upcoming Events
- 12) Classifieds
- 13) Who We Are
- 14) Membership Application and Renewal Form

### Editor's Comments

Mark Briggs – EAA Chapter 245 Newsletter Editor



Wow – talk about "interesting times" in which to live! We have all experienced massive upheaval in our lives in recent weeks. The COVID-19 pandemic is touching each and every one of us in our home lives, our work lives and in the ways in which we interact with others. Our EAA Chapter likewise has not been spared the effects of this virus.

You've undoubtedly noticed the cancellation of our monthly meeting for March, with future meetings on hold until our various levels of government see fit to once again allow public gatherings. That may take days or weeks or months. This kind of uncertainty, along with essentially being shut-in for an indeterminate time, is causing many of us to feel very uncomfortable. Fear not – some good reading is near to hand!

This month's edition of *Carb Heat* features our usual news from our Chapter executive, as well as two terrific articles submitted by members.

Peter Whittaker shows us the progress made by the team working to build our Chapter's Zenith CH750 Cruzer aircraft, including some excellent photos detailing some of the challenges which have been overcome in pushing this project ever-closer to the finish line.

Yvon Mayo shares with us the story of the unfortunate demise of his beloved Cessna 177 Cardinal. I can't imagine what it has been like for Yvon to go through this experience, something I wouldn't wish on any aircraft owner.

Past issues of *Carb Heat* have been flashy, visually appealing, professional in appearance. When I embarked on the task of editing our newsletter, I did so for the simple reason that our previous editor wished to retire from the role. When volunteers were sought, nobody else would do the job. You're stuck with me because I was dumb enough to put my hand up to volunteer! I'm the first to admit that I don't have the talents of our previous newsletter editors, nor do I have the patience to spend days of labour fighting word processing software that seems to have been created to amuse the devil himself. The net effect is as you see it here – this edition of *Carb Heat* is very plain. It is my sincere hope

that future editions will improve, but in the meantime I can only ask that you bear with me as I work toward producing a newsletter which strikes a balance between an appealing format and a tolerable labour content.

For those who may wish to complain, I might suggest that your efforts would better be invested in volunteering to be our newsletter editor, whereby you might showcase your considerable skills. (This statement is only *partly* tongue-in-cheek.)

I hope you enjoy this issue. Until the next time, I remain...

Ed.

Pictured below in my gloved hand is one of the few friends who still visit me in the hangar these days...At least I don't feel totally isolated when this little fellow comes to say h<u>ello!</u>



### President's Message

Mark Richardson – EAA Chapter 245 President



Well, here we are almost at the end of a somewhat mild winter eagerly anticipating the coming flying season. At least, those of us who haven't flown since last autumn are eagerly awaiting it. The rest of you who freeze your nether regions off in the dead of winter have my grudging respect (and no small amount of envy.)

As I type this the world is in convulsions over the COVID-19 pandemic with large gatherings of people being cancelled or banned, major sports leagues suspending or cancelling their seasons, and the world's toilet paper supply in dire jeopardy. I understand all of it except the toilet paper thing.... People are frightened and the push to limit contact at large gatherings is probably the right thing to do. However, I do believe that there is a lot of needless panic going on and I am concerned that we might be going to go too far and possibly damaging organizations and institutions irreparably. I guess time will tell. I just hope all of this has died down enough by summer such that we can enjoy Oshkosh.

Around the chapter things are picking up; the Zenith is making good progress, we have plans afoot for our Young Eagles day, and we have even started the initial planning for the fly-in breakfast. We have also picked up some new members, some of whom are either already building an aircraft, want to start building, or want to restore one. In fact, our new Webmaster Jack Hinchliffe is a new member. Thanks for taking on that job, Jack.

We had a pretty good turn out at the last meeting when Mike Ayling put on an awesome talk about his time with the Snowbirds. The descriptions, pictures, and anecdotes were funny, sobering, and fascinating all at the same time. I personally really enjoyed it (as it appears any of you did as it went quite long with questions...)

Finally, just a quick reminder for those of you tardy on your membership fees. Somewhere between a quarter and a third of last years members have not renewed. I would ask that you consider renewing soon as membership fees are what keeps the lights on in the hangar, pay the taxes, pay the lease, acquires and maintains the tools, etc. Oh, and the sooner you pay the sooner Phil will stop badgering all of us...

Hope to see you all at the meeting in March! (*Wishful thinking... Ed.*)

**Check Six** 

#### Mark



### Vice President

Mike Lamb - EAA Chapter 245 Vice-President



Having spotted a few flocks of geese heading north this week, I have a renewed hope for warmer weather and longer daylight flying hours. Especially the warmer weather, due to the number of aircraft I have flown this winter with little to no cabin heat.

With the coming of the summer flying season, I have been thinking about pilot currency. For those pilots who have flown little or not at all this winter, skills become rusty. Take some time to review your pilot operating handbook and your copy of the flight training manual. Review each exercise and consider the techniques and procedures for each exercise. If there are any exercises that you do not feel comfortable with, consider spending an hour with an instructor. Trust me, it will be worth the cost.

Keep in mind that exercise 14, spiral dives, should not be practised solo. This can be very dangerous. I have found many pilots are not following the proper recovery sequence:

#### POWER TO IDLE... ROLL WINGS LEVEL... EASE OUT OF THE DIVE

This three step process is *critical*.

Stay safe and stay current, for both your sake and that of your passengers.

#### Mikc

### **Treasurer and Marketing Manager**

Ken Potter – EAA Chapter 245 Treasurer & Marketing Manager



As I write this I'm in isolation and working from home. I arrived back from a 7-day Caribbean cruise 2 ½ weeks ago and went into 14 days of voluntary isolation. That initial period of time has expired but my employer, the Transportation Safety Board has dispersed all employees to work from home, including us on the Board. Of course, I've considered isolation to include my hangar where I continue to plug away working on my Cheetah. Now, I know you're going to say that this is not isolation but, I have a pointy stick two metres long to enforce "social distancing" on anyone attempting to come in the hangar door.

On the subject of social distancing, fun fact; did you know that an adult Llama is also 2 metres long?? *(Who else but our Treasurer would bring a Llama into this discussion? Ed.)* 

But enough about me. The finances of the Chapter are in relatively good shape. We received our 2020 lease payment amount from the airport and it has increase by \$ 40 / month due to increases in airport maintenance fees. That said, we've also seen more income from planes tying down so in the end I think everything will balance out. As well the hiatus in building the Zenith will save us a bit as the build team seemed to be hell bent on using up Aircraft Spruce Canada's entire stock of AN hardware (just kidding guys, you're doing a great job). Anyways, the fly-in breakfast is still set for Sunday September 20th so we'll keep our fingers crossed that some normalcy has returned to the world by then. Until it does, and in all seriousness, be safe everyone and keep up the hand washing and social distancing.

#### Cheers,

Ken

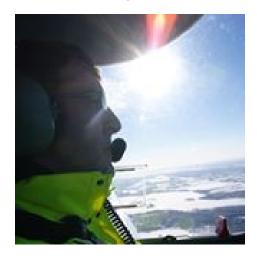
(Pictured below.. Ken's hangar buddy. Ed.)



(And here I thought he was talking about <u>THIS</u> kind of Lama... Silly me! Ed.)



#### **Secretary** Mark Cianfaglione – EAA Chapter 245 Secretary



With the warmer season approaching we have to start thinking about the "social" side of the chapter hangar at the airport. There have always been a few projects which have been on the "to-do" list. The deck on the south side and replacing the cracked window with a sliding patio door( which compliments the deck) are two that I can think of. All that is needed then is some large score cards and we can be like the two old men in the balcony from *The Muppets* show. (That is a joke. I've been self embarrassed by a dubious high energy landing or two without the need of an audience.)

In order to start either of these we need some supplies. (Free or nearly free is our price target!) If any of you know of a source for a sliding glass door that someone has and is willing to part with it would certainly spruce up the south side of the lounge. For the deck, if someone knows of a source of free or nearly free helical piles or some thick walled pipe(~3 to 4" OD) that we can fabricate them from, please pipe up (pardon the pun). Luckily Carp is essentially a large sandbox so they would be ideal to act as deck supports.

These are things that perhaps someone we know might have and we can start a project or two to make our chapter a great hangout for watching the day go by and enjoying aviation.

#### Mark C.

### **Operations** John Montgomery – EAA Chapter 245 Operations



We have started the annual transition from winter to spring operations at EAA 245. The weather has been warming and the airport glaciers are retreating. This is where I remind everyone to please refrain from driving on the turf for the next couple weeks. There is very poor drainage around our end of the airfield. The water table has retreated below the surface this week – but only just. The surface may look ok, but I know from personal experience that under the surface lurks good old Canadian muskeg. If you drive on the grass you may get stuck – but note that you \*will\* create ruts. This will cause a mess we will need to clean up later and issues for aircraft. For now, unless you need to deliver or pick up a heavy item from the hangar, do not drive on the turf, including the "winter road", and please park your vehicles on the pavement. One option is the RCMP ramp across from EAA.



We could use more help from our members to maintain our facility. As the Operations Coordinator I have enjoyed puttering around the hangar as it gives

me an excuse to get out of my house. However I notice that there seem to be relatively few of us who do simple things like picking up garbage and hauling the garbage away for disposal. The hangar is a bit of a mess right now and I am looking forward to our annual spring clean up.

The workshop is a messy and cluttered right now as well. This is not surprising since there is an airplane taking up all the space! My plan is to move the Cruzer out of the shop and into the hangar at the beginning of April when our winter hangar tenants should be able to move.

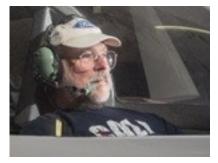
Remember that we are a cooperative club. We are all in charge of club maintenance. If you see something that needs doing, do not assume someone else is taking care of that. If in doubt, contact me as that is what the Operations Coordinator is supposed to be for.

See you at the hangar,

John M.

#### **Membership**

Phillip Johnson – EAA Chapter 245 Young Eagles Coordinator

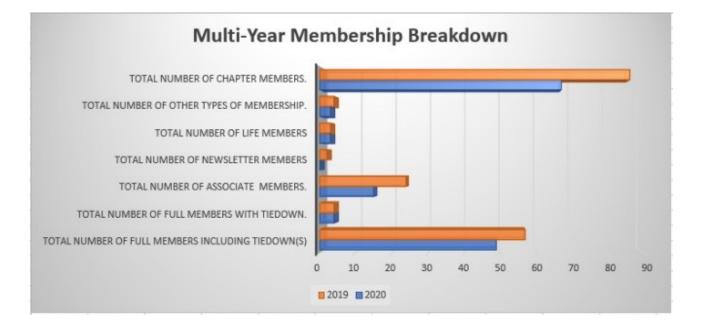


We're now deep into March 2020 and, as you can see from the two images below, we have a way to go in respect to having our membership renewals in good standing. We have changed the door codes to the clubhouse and machine shop and full members, in good standing, have been advised of the new codes. We have thirteen full members who have not renewed their membership although I believe two or three of those are unlikely to renew again this year so please could those members send their dues to Ken Potter or advise me if they do not wish to renew. I will provide them with the door codes once they complete their renewal.

There are also thirteen associate members who have not renewed at this time so please could you send your dues to Ken Potter if you wish to renew, or as a courtesy, advise the membership coordinator if you do not wish to renew so that I may strike you from the list. You will not receive emails from me asking you to renew if you are struck from the list.

So far this year we have had seven new members: Andrew Henry, Gilbert McCraw, Jack Hinchliffe, Joel Haas, Peter Whittaker, Philippe McCraw, & Scott Savage. If you haven't already done so, then please introduce yourselves to these new members. Jack Hinchliffe has also joined the executive as webmaster so please welcome him on board for jumping into that task.





As many of you know, I am now a snowbird and spend the winters down south. To facilitate membership please remit your membership dues to treasurer@eaa245.org preferably using eTransfer. eTransfer provides us with the best traceability for payment and removes the possibility of an error or mistakes on our behalf. If eTransfer is not your thing then cheques or cash will also work. Once Ken Potter (Treasurer) receives your remittance he passes the email on to me so that I can enter it into the data base. Having you entered into the database is important as it stops me from pestering you if you have already paid. I will be pestering all members not in good standing starting next week. If any of you need to contact me please use membership@eaa245.org or call my mobile number 613 790 4929. I do have a calling plan so you will be calling a local number and I will not be any international surcharges.

While I am down South enjoying the sun, I have also joined up with EAA Chapter 1279 in French Valley California. We have one group building an RV7A which should be completed later this year, and another member who is refurbishing a Long-Eze. Naturally I am helping the Eze builder as this is a composite project. Since he has little composite experience, I've been able to give him a lot of support.

One of the members had an interesting motor glider which was being prepared for sale. With the extended wingtips this would not fit in the 40' hangar, and guess what, we had a transient Cozy MKIV on the field so of course I had to go and see that one. I can't seem to find the owner though. It's very pretty.

Phillip Johnson



### Young Eagles

Mark Briggs – EAA Chapter 245 Young Eagles Coordinator

Oh boy, where do we start?!?!?

Let's start with a 'tentative' date, with the "tentative" term coming to us thanks to COVID-19...

Saturday, June 13<sup>th</sup> is International Young Eagles Day!

Last year we scheduled our Young Eagles event for a date in May, then Mother Nature decided both our regular date and our rain date should be rained out. Of all the nerve! By sheer coincidence, our 2019 event was postponed to a date in June that just happened to be International Young Eagles Day. This year, instead of requiring Mother Nature to steer us toward that date we figured it would just be a whole lot easier to avoid the highly variable May weather and go for the sure thing in June.

Please reserve June 13<sup>th</sup> on your calendar! As always, we'll need all the support we can get from our terrific chapter members and their families. Pilots, marshals, registration staff etc etc. I'm always amazed by the way our members just "make it happen."

EAA has implemented a program by which chapters receive a small cash contribution for each Young Eagle flown. The funds provided by EAA in response to our chapter's 2019 Young Eagles flights will allow us to purchase a much-needed laser printer which will be used to print registration documents in advance of and on the day of the event, smoothing the flow of people from the registration tent to the airplanes.

I'm looking forward to another Young Eagles event and all the smiling faces it will bring. See you June 13<sup>th</sup>!

#### Mark.



### **Webmaster**

Jack Hinchliffe – EAA Chapter 245 Webmaster Extraordinaire



(A special word of welcome to our new and very energetic webmaster – thank you, Jack for having taken up the torch! Ed.)

Hello everyone, my name is Jack Hinchliffe and I am the new webmaster for chapter 245! I am new to the chapter in general, joining in December of 2019. I am 19 years old, and hold my private pilot's license. I have been flying since I was 15, I have flown numerous aircraft types, and always looking for the next set of controls to get behind! Now enough about me, more about webmasterrelated things.

I have set up and manage the NEW chapter webpage found at <u>https://chapters.eaa.org/EAA245</u>. I am still in the building phase, and would like input into the website design from the rest of the chapter. I encourage anyone with suggestions to contact me at <u>webmaster@eaa245.org</u>. I am also looking to set up a page on the chapter website for member photos and videos. To do this, I first need member photos and videos to post! If you would like to have photos of your builds, aircraft, events, or anything EAA related for the public to see, please send it to me at my email above! I look forward to getting to know the members of EAA 245 better, and hopefully grow awareness of the chapter through the use of the website!

Safe flying,

Jack

### MEMBER ARTICLES

### EAA Chapter 245 Zenith 750 Cruzer Project – Update March 3, 2020

Text and Photos (except as noted) by Peter Whittaker [EAA# 1350577]

Work has continued on Sundays on the 750 Cruzer project through the winter and has concentrated on the tail section and associated control surfaces. Preparation work ahead of connecting rudder and elevator control cables has involved fitting the tail fin forward fairing which connects the tail fin to the fuselage top, fitting fairings at the exit points for the rudder cables on the bottom rear fuselage sides, fitting rudder stops and carrying out the initial balancing of the elevator. With completion of these jobs, the rudder pedal assembly was reinstalled as was the nose wheel. The rudder pedal to nosewheel control rods were installed next in preparation for installation of the rudder cables. Elevator cables were installed this past Sunday, March 1<sup>st</sup>. Yves, Edward and Irv plus the writer have now had numerous fun-filled Sundays putting these components together, reviewing plans, searching for hardware and finishing the installations.

#### Rudder Cables:

One of the first jobs in preparation for fabricating and installation of the rudder cables was to re-install the rudder pedal assembly which includes dual pedals and dual brakes. The pedals were aligned upright and even with each other for both the pilot and co-pilot sides and then the nosewheel connecting rods were installed and connected to the re-installed nose wheel strut. The nosewheel was clamped (Fig.1) into the centred position while maintaining alignment of the rudder pedals.



Figure 1: Nosewheel strut clamped to its' centre or neutral position at the bottom of the "V" notch in the strut bearing block.

Next, the rudder was centred at the neutral position and clamped to the tail fin (Fig.2), the aim was to have all steering components clamped into a neutral position and visually confirm alignment with the aircraft centre line along the top fuselage. With these parameters satisfied, control cables could be cut to length.



Figure 2: Rudder clamped into the centred or neutral position and aligned with the tail fin and aircraft centre line along the top of the fuselage.

Rudder cable exit fairings plus their Delrin plastic inserts, to prevent cables from rubbing sheet metal at the exit slots, were positioned and riveted in place (Fig.3). Turnbuckles were to be placed at the rudder horn and the clevis end of

the turnbuckle was attached on each side of the rudder horn with an AN3 bolt, castle nut and cotter pin. To give free rotation of the clevis end, some of the rudder horn leading edge had to be filed away (Fig.4).



Figure 3: Rudder cable exit fairings have 2 components, a Delrin plastic insert (arrow) that the cable slides through and is protected from the fuselage sheet metal at the exit slot and the aluminum fairing. Initially a string was used to position the fairing relative to the cable position.

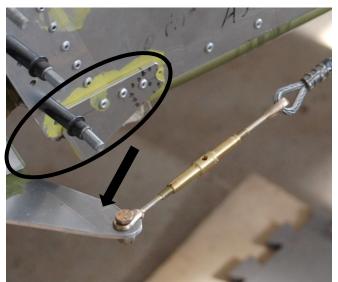


Figure 4: To give free rotation of the turnbuckle clevis during rudder movement, some of the rudder horn leading edge had to be filed away (arrow). The right rudder stop is also shown (circled) which allows a maximum deflection of 20°, left rudder stop is the same.

The rudder cables are continuous lengths from rudder horn to rudder pedal and cross over in front of the seat spar such that the left cable at the rudder horn goes to the right rudder pedal and vice versa. Cutting the cables was done by wrapping electricians' tape at the cut point (to prevent fraying) and using a Dremel fitted with an abrasive cutting wheel. This gave cleanly cut cable ends

for threading around thimbles and through copper sleeves, the sleeves were crimped using the Chapters' Nicopress tool and the crimps were checked for thickness with the Nicopress guage. The cables were connected and crimped first at the rudder and turnbuckle, the cables were fed through the fuselage and attached and crimped at shackles attached to the rudder pedal tabs (Figs.5 & 6).

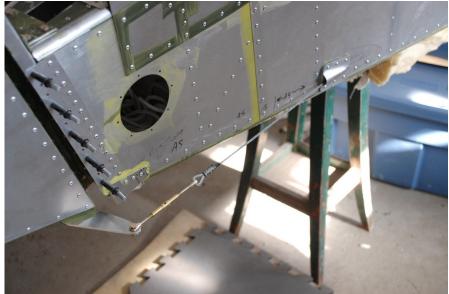


Figure 5: Cable and turnbuckle at rudder horn.

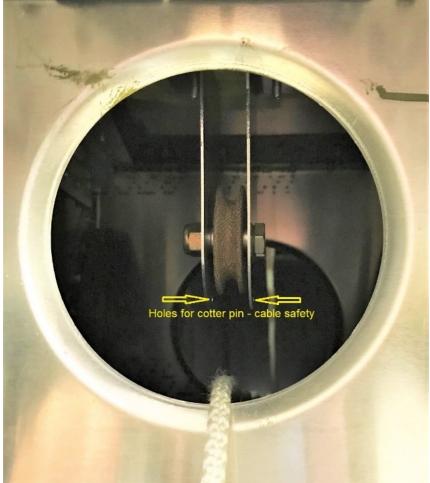


Figure 6: Rudder cables and shackles at the pedals.

With final assembly of the empennage, the rudder cables will be tensioned using the turnbuckles to give 25 lbs +/-5 lbs measured using a cable tensiometer.

#### Elevator Cables:

Prior to fabrication of the elevator cables, guide pulleys were installed at the rear fuselage to ensure that the cables would run clear of sheet metal. Plans called for installation of two pulleys, one for the elevator bottom cable (Fig.7) and one for the top cable (Fig.8). Cable rubbing was noted at the top lightening hole where the top cable exits the fuselage. To prevent rubbing, a third pulley was installed, inverted, forward of the lightening hole (Fig.8). Tensioned strings were used to temporarily define where the cables would run since no cables had yet been cut to length.



*Figure 7: View through the rear fuselage bulkhead showing the inverted pulley for the elevator bottom cable. Holes (arrows) drilled through the bracket sides allow for a cotter pin which serves as a safety to prevent the cable from jumping the pulley.* 

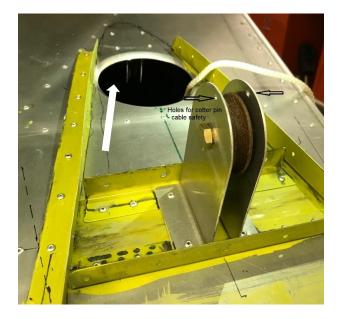


Figure 8: The top elevator cable pulley sits on top of the rear fuselage skin and will give the cable clearance over the leading edge of the stabilizer, holes for the safety cotter pin are visible at the black arrows. An inverted pulley was installed forward of the lightening hole (white arrow) to prevent the cable from rubbing the forward edge of the hole.

A final job before starting to cut the elevator cables to length was to balance the elevator. This was done using steel weights added to the elevator arm until the elevator sat at neutral, hands off. Zenith provided a collection of weights at two different thicknesses to allow for variation in the final weight needed for balance (Fig.9). An elevator down stop will be added at the weights to prevent the arm from hitting the cable as it goes over the pulley.

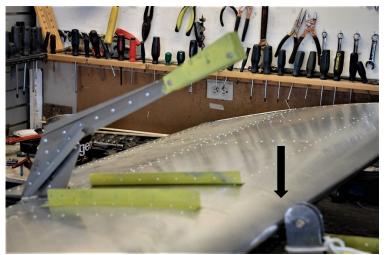


Figure 9: Weights (in green primer paint) were attached to elevator upper arm to achieve static balance. This will change slightly after painting and final adjustments can be made before the tail fin forward fairing is riveted in place. The cable pulley is just forward of the stabilizer leading edge (arrow).

Each elevator cable was fabricated in two lengths, a long section of 10' runs from the elevator (Figs.10 & 11) to the bottom access hatch behind the seats. A shorter section is connected by a turnbuckle to the long cable, the forward end of the short section attaches by a shackle to the elevator bellcrank (Fig.12).

Tension adjustments are made at the turnbuckle and this allows for some adjustment to the stick position. The stick was clamped into a neutral position at 90° to the torque tube to allow the bellcrank to be aligned at 90° to the short sections of cable. These positions determined the final length of the short sections of cable.

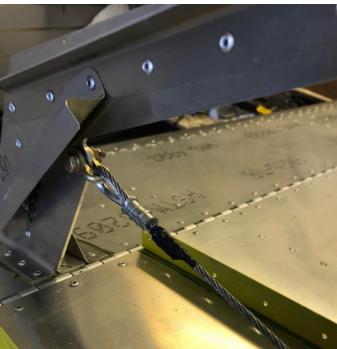


Figure 10: Upper elevator cable attached with a shackle at the upper elevator arm.

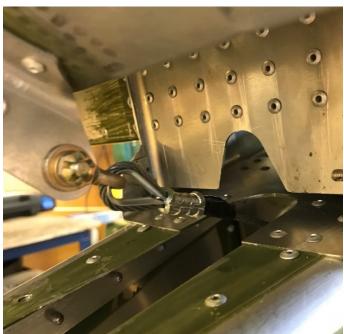


Figure 11: Lower elevator cable and shackle attachment to the lower elevator horn.

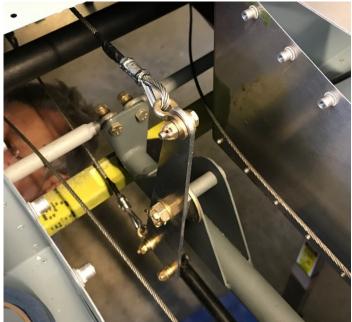


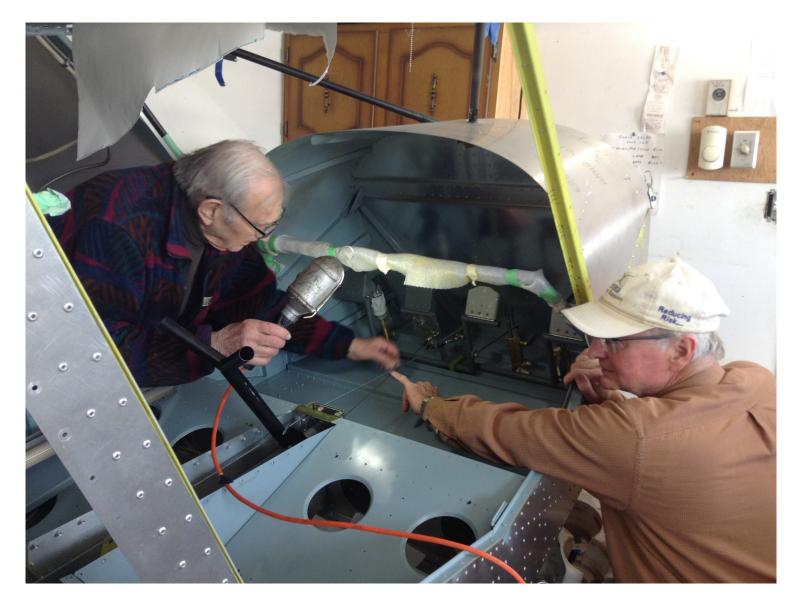
Figure 12: View of the forward elevator cable shackle attachments to the elevator bellcrank located at the back end of the control stick torque tube. This view looks down and out of the bottom access hatch.

The next step will be to fully assemble the empennage, connect rudder and elevator cables and check for free and clear movement at the rudder pedals, control stick and at the rudder and elevator control surfaces. One movement to be checked will be that full up elevator can be achieved without the control stick being blocked by the pilot as the stick is pulled back.

There are small fitting jobs yet to be done but, the next key jobs are the instrument panel fabrication and installation as well as the engine mount and engine installation. Final empennage and wing attachment will be done once the Cruzer is in the hangar this spring and summer.

Peter

(As soon as we get the all-clear from public health officials we'll get back to our regular Sunday build sessions. I know Peter and the build team would welcome additional helping hands! Below you will see some of our build team hard at work. Ed.)



Irving Slone (left) and Peter Whittaker (right) puzzling through rudder control cable installation. Photo Credit: Edward Atraghji



Yves Marchand (left) and Peter Whittaker (right) in deep discussion over the best way to get the job done.

Photo Credit: Edward Atraghji

### The Tale of the Cardinal and the Snow Plow

Text and photos (except as noted) by Yvon Mayo

I never make New Year's resolutions, and it's a good thing I don't. I spent New Years Day with my family in Montreal, and little did I know my life was about to change. For at 9:30 AM on the second of January I was just about to leave the house when my cell phone rang.

The call was from Jason Kowalski who is both the Airport Manager and the Operations Manager at the Rockliffe Flying Club. "There's been an accident at the airport. I'm sorry to say your plane suffered considerable damage." He sure got my attention. The airport manager went on to inform me that the snow plow had reportedly slipped on a patch of ice and hit my Cessna Cardinal; C-GLYM. I gathered a few things such as keys and camera and immediately drove over.



Figure 1: The plow – definitely bigger and heavier than a Cessna Cardinal!

#### First stop: C-GLYM

The scene at my tie down spot was not pretty. The damage seemed to be all around the aircraft. The cowling was caved-in and had a hole. The muffler was wrecked and there may well be more damage in that area. The left wingtip was shattered with a piece hanging on the wire for the tip light, and another suspended on the tube for the fuel air vent. There was a gaping hole under the tail where the tie down skid had been ripped off. The right wing had an even bigger hole where the tie down ring had been. The main spar was twisted and ripped apart. The leading edge of the wing and the trailing edge of the flap were also pushed-in. So, all the extremities of the aircraft were affected; the right wing, the left wing, the nose and the tail. The damage was even worse than I had expected. I owned this plane for more than 8 years and lovingly participated in every inspection, doing some of the work myself. My wife had given me a new Garmin radio just last year. I was going through a lot of emotions.



Figure 2: Damage to cowl and right wing



Figure 3: Damage to left wing

#### Second stop: Airport Manager

He was very concerned and apologetic about the accident. He mentioned that he would have some pictures to send me later in the day. Mind you, his demeanour would change after he had talked to his insurance company. He provided very little information after that. However, he was able to provide the pictures he had promised. Those pictures helped me understand a lot of details.

#### Third stop: Maintenance Crew at the Hangar

By then the Aircraft Maintenance Engineers were back in the hangar. It turns out that the Director of Maintenance, Patric Giunta, and his staff had been working for hours already to reposition C-GLYM. I obtained a few pictures that Stephen Humphrey (AME) had taken.

Those pictures were very surprising and left no doubt about the cause of the accident. It also allowed me to understand how the aircraft had been damaged all around. This was the picture that told the story.



Figure 4: How did the Cardinal leap off its tie-downs and end up on top of the plow?

#### What REALLY happened? (My take on it)

During the early morning hours of 2 January an employee of the Rockliffe Flying Club was clearing snow. The snow plow was operating on the apron just in front of the long row of airplanes that are tied down. Just before 5:00 AM, the plow somehow slipped, deviated from its straight line, and struck my aircraft. The blade of the plow was oriented to push the snow away from the line of aircraft towards the centre of the apron. This blade hit the lower cowling, tearing a piece of aluminum, pushing through to crush metal (mostly the exhaust manifold and muffler). This is a big heavy vehicle and inertia kept it moving. The airplane was tied down with two strong nylon ropes on each wing plus one heavy rope tying the skid under the tail. The ropes did not break at all. First, they stretched because nylon does and accumulated elastic force. The landing gear on a Cessna is made of tubular steel. This acts as a spring to absorb forces in a landing. So, the landing gear also accumulated some elastic tension. Next, the skid under the tail broke off, ripped some metal skin and part of the last bulkhead, leaving a big hole. This set the aircraft into a left turn. At the same time the tie down ring pulled away, breaking and tearing the main spar and other internal structure of the wing. This released the tension that had built into the landing gear, sending the aircraft into a strong bounce upwards and turning to the left. The wing went so high that it jumped higher than the box on the back of the truck. That is when the left wingtip hit the ground and shattered.

Next, the right wing landed on the back of the truck, leaving the right main wheel up in the air. This also caused further damage to the wing, leaving a gaping hole. The truck finally stopped. The truck was also stuck, unable to move for fear of causing more damage to my aircraft and also to the Cherokee that was next in line.

Pictures were taken, phone calls were made; the cavalry was called in. The Aircraft Maintenance Engineers (AME) had to devise a way to disentangle the aircraft from the truck. In the end, they had to tie a cargo strap near the root of the right wing and use heavy machinery to raise the aircraft and let the truck drive away. This strap damaged to leading edge of the wing and crumpled the trailing edge of the flap. Altogether, the airframe was subjected to strong and unusual forces.

#### Fourth stop: Insurance Settlement

I was insured under a COPA Gold policy. I sent an email to my insurance broker (Magnes) to inform them of the accident. They called me back and explained that an insurance claims adjuster would be in touch.

There are very few claims adjusters that work with aircraft accidents in Canada. I was dealing with Norman White of McLarens Aviation. He is qualified as a commercial pilot, a licensed AME, a previous Cessna dealer, and has many years of experience as an adjuster. One of his prime objectives is to minimize the cost to the insurers behind the policy. In this case, the responsibility for the accident was in no doubt.

I had to fill out a "statement" concerning the accident and send him pictures as well. A few days later, he came to see the airplane and took pictures both inside and outside. There was more reporting to do and legal documentation required.

The cost estimates for repairs were prohibitive. In the end, the damage was so extensive that the aircraft was declared a total loss. A few weeks later, I received a cheque for the value of the aircraft.

#### Fifth Stop: What Now?

When disaster strikes, new opportunities appear. The whole incident changed my aviation life very quickly. I am not going to rush to replace the aircraft. It is a time to reflect on the issue before deciding on the best course of action.



Figure 5: Rest in peace C-GLYM. What a sad ending to a beautiful airplane.

Photo Credit: Hélène Lavigne

### **Upcoming Events**

With spring just around the corner, this should be a very busy section of our newsletter. The limitations recently imposed on public gatherings have cast event planning to the wind until we emerge from this state of uncertainty. Please keep an eye on this space for updates.

- **May 5<sup>th</sup>** - **10<sup>th</sup>** – Sun and Fun – Lakeland, FL – NOTE this date will be confirmed by organizers on our about April 17<sup>th</sup> and represents a delay from its usual "first week of April" timeslot.

- June 13<sup>th</sup>, 2020 – EAA Chapter 245 Young Eagles Day – This date is tentative, pending our emergence from isolation requirements

- July 20<sup>th</sup> - 26<sup>th</sup> - EAA AirVenture - Oskhosh, WI

- September 20<sup>th</sup> – EAA Chapter 245 Fly-In / Drive-In Breakfast

### <u>Classifieds</u>

#### CHALLENGER II ADVANCED ULTRALIGHT - \$22,500 (Price Drop!)

320 HRS TT Rotax 503, Puddle Jumper Floats,
Electric retractable wheel skis. Garmin 496 GPS,
Transponder, Radio, Intercom. 15 gal tank.
Turbulance aviation seats and interior. Owner built and maintained.
Allways hangered.
Canopy cover, engine cover, extra prop.
Located Carp (CYRP)
Contact: Andrew Ricketts andycibuy@gmail.com



#### Transponder

Bendix King Transponder KT-76 A with an ACK ENCODER and a Bendix King Shark Fin KA-60 Antenna.
It has been checked by TORONTO AVIONICS LTD and never installed since.
All for \$500.00
Contact: James B. McKinley, Curran, Ontario .
Tel: 613-851-8424

## 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.

President: Vice President:	Mark Richardson- 613-983-7764 <u>president@eaa245.org</u> Mike Lamb - 613-790-4929 vice.president@eaa245.org
Treasurer and Marketing Manager	
Secretary:	Mark Cianfaglione - 613-600-4501 secretary@eaa245.org
Operations:	John Montgomery - 613-286-8543 ops@eaa245.org
Membership Coordinator:	Phillip Johnson - 613-790-4929 membership@eaa245.org
Webmaster:	Jack Hinchliffe – webmaster@eaa245.org
Newsletter Editor:	Mark Briggs - 613-725-4361 newsletter@eaa245.org
Technical Information Officer:	Pillip Johnson – membership@eaa245.org
Young Eagles Coordinator:	Mark Briggs - 613-725-4361 young.eagles@eaa245.org
Hangar Group Liaison:	Bill Reed - 613-858-7333 Bill@ncf.ca
Past President:	Phillip Johnson – 613-790-4929 membership@eaa245.org

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:	Ottawaa 2455	
Street:		
City/Town:		
Province:		
Post Code:		
Phone ( )		
Aircraft Type:		
Registration:		
Aviation Affiliations		
EAA #	Expiry Date:	
COPA: RAA	UPAC	
Other		
Annual Dues: January 1 <sup>st</sup> t	December 31 <sup>st</sup> (pro-rated after March 31 <sup>st</sup> for new members	.)
Newsletter Subscriber:	\$50	
Newsletter only		
Associate Member:	\$50	
Full Member:	\$100*	
Newsletter, hangar, work	shop, tie-downs.	
Note. Associate and full	nembers must also be members of EAA's parent body.	
Cheques should be made	e payable to: EAA Chapter 245 (Ottawa)	
On-Line E-Transfers to T	easurer@eaa245.org are preferred.	

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