

Monthly Newsletter of the Kitchener-Waterloo RAA

- December 2018 -



At the November meeting, Wayne Hadath drew a large crowd to talk about air racing. Wayne advised us that any airplane type can race including certified, homebuilt, warbirds, and even ultralights. He told us about the structure of the races, how points are awarded, race fees, costs and discounts, and how to maximize aircraft performance. Of course, knowing the safety rules for the race and having personal limits that you follow religiously are paramount.

President's Message

Those of you that are still building your planes didn't miss much flying this fall, since the weather turned colder and wetter mid-October limiting the number of good flying days. In spite of the early shut down, I still managed to get 95 flight hours in this year, so I am thankful for another good year of flying and camaraderie with KWRAA members and other pilot friends.

Another Christmas Party has come and gone, so you will find a few photos and details in this issue as well as a follow-up on my carb float problem that I described in November.

Lee and I have had a good look at the tools available from Gunter Malich's workshop and will be purchasing a significant number of aviation specialty tools and a good supply of clecoes, rivets and fasteners that may be of interest to the chapter members who are building, repairing, maintaining or overhauling their aircraft. We will be obtaining another cabinet to store these tools in and doing an inventory of new stuff to add to the existing one. The KWRAA tool crib of loaner tools is one of the main reasons for being a KWRAA member and saves individuals from having to purchase all of these tools on their own. Even if you are not currently building a project plane, these tools can be very helpful during your annual inspection and maintenance. Make use of them! A full list of tools will be sent out soon, likely with the January issue.

The executive will be meeting soon to discuss the direction of the chapter for 2019 and discussing speakers for next year. So far we have an insurance broker in January and Fred Grootarz doing a recurrent seminar in February, but we are looking for any input you may have, so let us know ASAP if there is something else you wish to see next year.

2019 is going to be a great year for KWRAA. - Dan

Kitchener-Waterloo RAA *Page 1 of 6*

Tech Tip – by Lee Coulman, KWRAA

Splayed Wire Rope Repair – Carb Controls.

The control cables for the throttle and starting carb ("choke") on my Rotax 912 have always been a nuisance. The cable end would splay out causing great gnashing of teeth and tongue biting to get the cable end back into the securing clevis.



Last time this happened was on the dock in Sault Ste. Marie, several hours from home. Like many amateur-built aircraft mine also has other similar cable controls, including some for my gear retraction and rudder controls. After 12 years of fighting with this problem, I thought there must be a solution. The plan would be to trim the cable ends, and seal them with cyanoacrylate (crazy) glue and thread locker using some special "slippy" pliers that I made.

Step 1: Get a decent pair of cable cutters.* These must be heavy duty and not just diagonal wire cutters. The cuts will fray very quickly if a semicircular blade is not used. I just received a German made Knipex (model 95-62-190) with integrated crimper. I saw these used on YouTube and I don't regret the \$65.



*Note: A rotary cut-off tool may also work for this task, but wearing safety glasses is a must!

Step 2: Assuming that you've already damaged the wire, cut off the worst of the frayed portion with the good cutters without compromising the length of the cable.

Step 3: Make a PTFE jawed set of cable pliers. PTFE (Teflon) has low abrasion



resistance and most types of glue won't stick to it. I obtained PTFE washers from the plumbing repair shelf and thoroughly cleaned both surfaces with that vile smelling PVC/ABS cleaner (Cleaner 33). I roughed up the washers with a jeweler's file and glued them to some spare pliers using good quality epoxy. While the epoxy was setting, I made sure the washers lined up by gently squeezing the jaws together. After curing, I drilled a 1/16" hole between the mating surfaces of the washers, making a groove, on both surfaces. I used a jeweler's file to fine tune the groove size.

Step 4: Clean the cable end with a very good degreaser. I used what I had at arm's length, so the PVC/ABS cleaner got used again to clean off any oils and dirt. Carb cleaner has also been suggested.

Step 5: Carefully apply cyanoacrylate glue to the last ½ inch of the cable. Use the PTFEjawed pliers to squeeze from the dry cable towards the wet end, twisting to restore the weave as you pull. Try to flood the cable end with glue but not too much. Pull the cable through a number of times, twisting with the rope weave as you go. Don't leave it too long in one position as it may stick to the tool.



Step 6: Carefully apply Loctite Permanent Thread locker and work it into cable end using the pliers. Keep pulling the cable through the pliers until it is smooth.

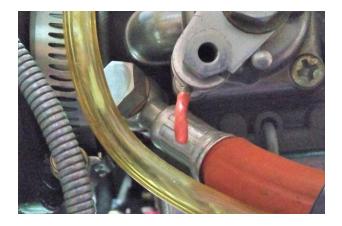


Whole Lotta Shankin' Goin' On... (Part 2)

As you may recall from last issue, during a flight up to Owen Sound and area on October 30th, I discovered some rough running and hard starting issues with the Rotax 912ULS. After determining it was a carb float issue, I ordered a new set* and installed them.

Although the flying season ended quickly for me this year due to weather, I was able to take the plane for a flight and confirm that the floats were indeed the problem. Once replaced, the Rotax 912ULS ran like new and I look forward to another great and hopefully trouble-free flying season in 2019. **Step 7:** Trim off any excess wire with the cutters. Apply more Loctite as necessary to achieve a smooth surface, without increasing the overall size too much, which could prevent you from being able to insert the cable into the hole in the clevis or clamping nut.

Step 8: Once the cable has been inserted through the clevis or clamp on your carburetor apply a short length of heat shrink to seal the deal, keeping out moisture and debris as well as holding the cable in a nice tight bundle.



This should make future removal and installation of the cables a lot less problematic and make the installation look a lot more professional too.

Lee Coulman, VP – KWRAA

If you have a Rotax 912 or 914 series engine of the 2012-2014 vintage, be sure to check out <u>Rotax Service Bulletin SB-912-065 / SB-914-046 and SB-912-065UL / SB-914-046UL</u> and <u>ASB-912-069UL / ASB-914-051UL</u>. Check your carburetor floats regularly until you have received the latest version of floats from Rotax. The latest version of floats have none of the little indent masks on the side shown in the Bulletin and a different part number of 861188.

Recently, I have read stories of similar issues in a 912-powered Vans RV and a Kitfox too.

* After speaking with Rob Seaton at Rotech Motors in Vernon, BC, I expect that the cost of the replacements will be refunded by Rotax.

- Dan

Kitchener-Waterloo RAA Page 3 of 6

KWRAA Christmas Party!

On November 30th, the population of Heidelberg swelled by almost 40 people for a few hours as we celebrated the KWRAA Christmas Party. Members enjoyed a great home-style meal of ribs, chicken and roast beef and all the trimmings. As usual, pictures and videos played on a screen in the background showing some of the adventures our members had this past year.



After the meal, the Holy Golly Award was presented to Roger Deming for stepping up as a fly-in host by not only allowing the use of his airstrip, but also going out of his way to accommodate attendees at the fly-in. Roger's development of his strip to allow more amateur built and ultralight aircraft to operate there was another contributing factor in his selection for the award. Congratulations Roger!



The Larry Edwards Award went to Ed Welfred for his ongoing support of chapter activities including his assistance to other pilots at Aviation Fun Day at Waterloo Region International Airport for several years, his presentation on his Bearhawk project, his assistance with Gary Wolf's metalworking presentation and his unwavering attendance at chapter meetings. Unfortunately, Ed was unable to attend the Christmas Party, so I accepted it on his behalf and delivered it to him.



Besides our members and spouses, we had a number of invited guests at the party, including Susan Comber and Tim Dault, the owners of the Glendale Aerodrome at Williams Lake near Chatsworth, Ontario. Sue and Tim have been gracious hosts whenever Lee and I fly up that way and even assisted with some emergency repairs on my Highlander a while ago. Sue and Tim advised me that they enjoyed meeting our members and celebrating with us and hope that more of our members might be able to fly up there for a visit in 2019.



Also during the evening, we showed a number of photos of Gunter Malich, who passed away earlier this year, and his Vans RV8 aircraft as well as the CriCri that he built when he lived in Vancouver. During that short presentation we held a two minute silence in remembrance of Gunter, his friendship and his contribution as a director and fellow member of KWRAA.

Kitchener-Waterloo RAA *Page 4 of 6*



As usual, we had a 50/50 draw after dinner and drew door prizes until everyone received something to take home. Whether it was an aviation book, a chocolate treat, a decoration, a tool or flashlight, or something else, thanks to everyone who brought door prizes, no one left empty handed!



Thanks also to Pauline Copelston, who provided a number of excellent books from Gunter Malich's personal collection.



After the presentation and draws, there was plenty of time for visiting and viewing of photos and videos before heading home after a great evening of good company, good food, and good fun!



We look forward to having you join us for the 2019 KWRAA Christmas Party on the last Saturday of November!



Merry Christmas from your KWRAA Executive!



Kitchener-Waterloo RAA *Page 5 of 6*

Upcoming Events in 2019: (Highlighted lines are KWRAA Events*)

January 14	-	January Meeting at 7:30 in the Cadet building at CYKF		
February 11	-	February Meeting at 7:30 in the Cadet building at CYKF		
March 11	-	March Meeting at 7:30 in the Cadet building at CYKF		
April 2-7	-	Sun-n-Fun in Lakeland Florida, USA		
April 8	-	April Meeting at 7:30 in the Cadet building at CYKF		
May 13	-	May Meeting at 7:30 in the Cadet building at CYKF		
June 6-8	-	COPA National (Western) Convention in Innisfail, Alberta (CEM4)		
June 15	-	KWRAA Largo Woods Fly-in near Winterbourne (Tentative Date)		
July 6	-	KWRAA Fly-In – Location to be determined (Tentative Date)		
July 13	-	Zenair Open House – Midland at CYEE - Huronia Airport		
July 22-28	-	Air Venture Oshkosh in Wisconsin, USA		
July 27	-	KWRAA Fly-In at Roger Deming's – Kenilworth (Tentative Date)		
August 10-11	-	Gathering of the Classics in Edenvale		
August 16-18	-	UPAC Convention – Lubitz Field, Plattsville		
August 17	-	Aviation Fun Day at CYKF – Waterloo Region International Airport		
August 22-24	-	COPA National (Eastern) Convention Cornwall Regional Airport (CYCC)		
August 31	-	KWRAA Fly-In at Tom Shupe's in Mount Forest (Tentative Date)		
September 9	-	September Meeting at 7:30 in the Cadet building at CYKF		
October 21	-	October Meeting at 7:30 in the Cadet building at CYKF		
November 11	-	November Meeting at 7:30 in the Cadet building at CYKF		
November 29	-	KWRAA Christmas Party – Details to follow later in 2019		

* KWRAA events are fly-in and/or drive-in.

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Important Notes:

* **2019 Membership Dues** should be paid to Mike Thorp at the January meeting if you have not already paid. Be sure to bring your RAA Canada membership card with you. (You must be an RAA national member too!)

January's guest speaker is **Joanne Hy** from Sound Aviation Insurance in Toronto.

February is our Annual Recurrent Training session with Fred Grootarz.

March is tentatively a "**Show and Tell**" meeting... bring something interesting from your hangar or shop!