



Calgary Recreational Flying Club
COPA Flight 114





#### **Our Mission**

Promoting the safe enjoyment of aviation for pilots, aircraft builders and enthusiasts.



- 15 New Aviation Weather Website
- 19 Pilot Tip: Setting Pitch Trim
- 21 In Memorial Graham Millington
- 22 Classifieds
- 25 Your Executive

#### Our Vision

Welcoming owners and pilots of all types of aircraft including ultra-light, amateur-built, certified and other types of aircraft.

Connecting members through regular meetings, monthly newsletters, our website, social media, BBQ's and fly-outs.

Exchanging knowledge and information about flying and flight safety, and aircraft construction and maintenance via meeting presentations, newsletters and other events.

Sharing and enjoying real-world flying adventures.

#### Featured on the Cover:

Just a little bit of artistic embellishment just for fun. HO HO!

## PRESIDENT'S MESSAGE





## Wow, what a stretch of fantastic flying weather we've had for most of autumn!

After the big snow fall back in October, all we've had is a couple of skiffs that appeared and disappeared just as quickly! I don't remember an October and November as nice as this in a long time. Stu and I were up one day recently and experienced no wind, clouds or bumps, and probably more than 100 miles visibility. Awesome.

I have flown my Cessna 195 almost 7 hours over two weeks breaking in two new cylinders. That's two hours more than I flew it since last October. I'm happy to report that my oil consumption has gone from a gallon every 2 hours to nothing.

The oil level in the tank hasn't dropped in 7 hours, and that's on a Jacobs radial engine! Since the engine was overhauled in 2013 I've never had oil consumption lower than a gallon every 6-8 hours. I would guess that the rings on the #5 cylinder had been compromised for a long time.

Our November meeting was a little different from our usual format. We had various members talk about their projects they are working and training they have done recently. Thanks to Glenn, Bashar, Carl and Ashraf for sharing your experiences. Ashraf, an Aeronautical Engineer for De Havilland Canada, spoke about some of the really interesting projects and other stuff that he's involved with.

Stu brought us up to speed with the Nav Canada's Collaborative Flight Planning Services (CFPS) which was scheduled to replace the Aviation Weather Web Site (AWWS) on November 22.

However, a couple of days after the meeting, Nav Canada reported that the AWWS would not be decommissioned until February 28, 2024. The new CFPS has some good features but appears to be lacking other features that make it more user friendly. Perhaps Nav Canada realized that CFPS needed some more improvements before it goes live.

The attendance at our meetings has been declining with 21 and 24 members at our last two meetings. We're not sure why this is happening but we, the executive, are concerned that the club is not sustainable with these numbers. We are making great effort to bring value to the membership at our meetings and other events. If you get a chance, talk to other members who are not coming to the meetings and ask them why they're not. We believe we have a lot to offer to the aviation community.

Please note that our December meeting will be on Wednesday, December 13, at 19:00 at the Hangar Flight Museum. Our guest speaker, Rick Appleton, a Westjet 737 pilot, will talk about training and safety issues that he has experienced during his career and while providing flight instruction, checkouts and tailwheel training. Try to be there a little early so we can begin at 19:00 sharp.

We'll be serving pizza and drinks (non-alcoholic) at the meeting. Cost will be \$10 per member and \$15 for non-members so if you want to save \$5 make sure you see Andrew and pay the \$30 annual membership. He'll gladly take your cash, cheques or Interac e-Transfer. Our annual expenses include hall rental, website maintenance and member events. We will need to know how many pizzas to order, so please let us know by the evening of Monday December 11 if you are attending. Please RSVP to either:

Brian Vasseur (403) 828 - 5281 brian@brianvasseur.com or Brian Byl (403) 861 - 6716 bbyl@shaw.ca

Hopefully you've been able to fly during the great weather we've experienced lately. The days are getting shorter and colder so that means winter is almost here! Not many shopping days until Christmas!

## See you at the meeting! Brian



## Newsletter Update

DIRECTOR/NEWSLETTER EDITOR

GREG LABINE

## **Merry Christmas!**

This month, for fun, I've decided to do something different with the cover photo. Normally, it would feature a club member's aircraft on the cover however, I'm using an aircraft type which is quite familiar to our members but from very far away. The Merlin in the picture is probably the furthest north a Merlin has ever been flown. It is based and operated from Syltefjorden Fjord, in northern Norway. This is at a latitude of 70° 32′ 48.12″ N, equivalent to about 138 miles north of Tuktoyaktuk in the Arctic! So, maybe not quite the North pole, but close enough eh? LOL.

We have some great articles for you this month. In addition to our regular features, President's Message, Newsletter Update and Pilot Tips, we also have some fantastic submissions including Brian Byl's latest follow-up on his Cessna 195/Jacobs Radial, Cylinder challenges.

Brian Vasseur sent in a wonderful story on the ferry flight, of a Zenair CH250, he did to the southern Kootenays of British Columbia. An adventurous trip accompanied by some great photos. I look forward to more great content like this from Brian V.

Stu Simpson, once again proving to be a tremendous resource to our members, shared a Terrific Aviation Website and App that I'm sure most will find very helpful. Good find Stu! We are hoping to maybe have Stu do a little presentation on it in the near future, if we can convince him to talk a bit about it.

This is really important, in light of the forthcoming changes planned for the AWWS site.

Brian Byl's "Pilot Tip" this month is another useful one, I personally find them very helpful and am glad he brings them to us.

We also have a remembrance honoring a longtime member, Graham Millington, who recently passed. Thank you to Bob Kooyman for bring his passing to my attention, so that I could share it with you.

I hope many of you are planning to make it to our next meeting **Wednesday**December 13.

If so, please be sure to **RSVP either Brian Byl or Brian Vasseur** if you are planning to attend. This way we can have enough food for eveyone.

In closing, I take this opportunity to wish all of you and your families, a very Merry Christmas and happiness, with lots of flying, in the coming New Year!

Sincerely, GREG.

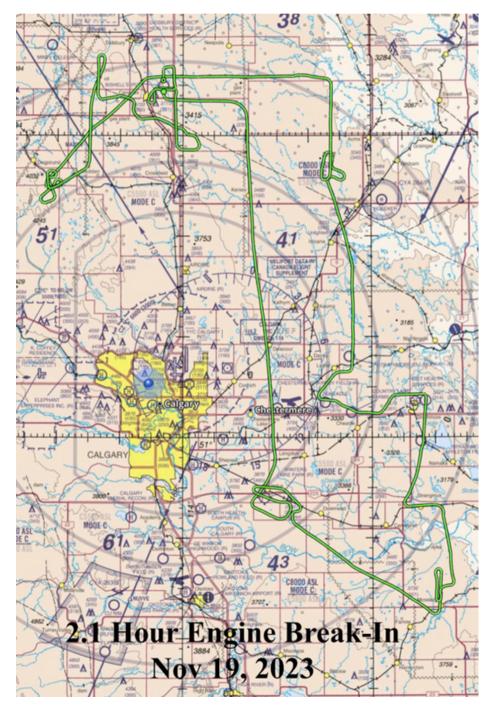




## CF-MLB JACOBS CYLINDER BREAK-IN

By Brian Byl

As I mentioned in my President's Message I finally finished the installation of the Number 4 and 5 cylinders. One set of rings on Number 5 was broken into multiple pieces but fortunately nothing went past the other rings into the crankcase. That would have caused much greater damage or a complete engine failure. Photos of the rings were in the September Skywriter.



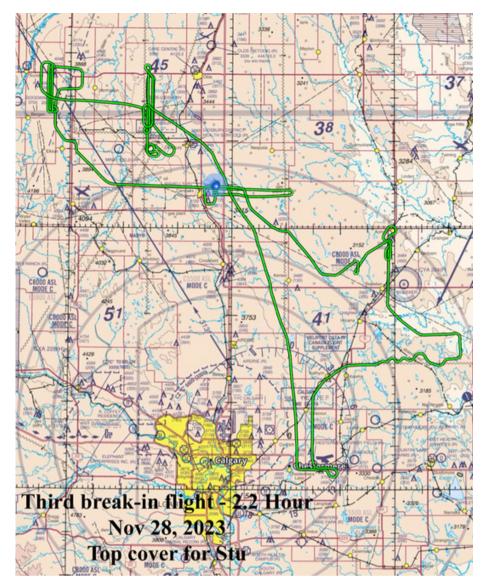
After many hours of working on the engine the first break-in flight occurred on November 13. The break-in procedure involves running the engine as hard as you can. In other words, "fly it like you stole it"!

You must keep the manifold pressure (MP) as high as possible and vary the rpm for at least two hours. Our field elevation of 3,400' ASL requires that I had to fly low to maintain a high MP. At 1,500' AGL the highest MP attainable is 23" so I flew at 1,000' AGL or lower for over

After two more flights of 2.1 and 2.2 hours on November 19 and 28 I now have 6.7 hours on the new cylinders and there has been no noticeable oil consumption. I would say the break-in is successful!

2.4 hours.

7



So what do you do when you have no destination in mind but need to fly for two plus hours at low altitude?

Here are my flight tracks from the last two flights. On November 28, I flew with Stu while he stopped in Sundre and Olds-Didsbury. Luckily the weather was beautiful – smooth, little wind and fantastic visibility. All three flights were very enjoyable and I'm looking forward to many more hours in the 195.

By the way I submitted the Nav Canada Public ADS-B Performance Report (PAPR) after my November 28 flight and passed with flying

colours in spite of having abottom mounted ADS-B antenna! It means I don't have to install a top-mounted antenna. Great news!



## BRIAN VASSEUR

#### **Vice President**

### Ferry Flight to the Kootenays



I've been looking for opportunities to build flying hours but I'm starting to run out of places to go. When Stu mentioned in early November that he needed someone to ferry a Zenair CH250 to Reno, Nevada, I was all in. What an adventure that would be, especially in November!

Why Reno? Stu was selling the CH250 for Bashar Hussein. I was the logical choice because I have my own Zenair CH250. However, the Reno deal fell through just as I was packing my bags.

Fortunately, Stu had another buyer waiting in the wings. He was from Castlegar, BC, and he actually showed up with money. The deal was done. The buyer, Poul, was a pretty experienced pilot, but had no tail-wheel time. Thus, it wasn't at all practical for him to fly it home. So all we had to do was to get the plane to Nelson, about 22 miles north of Castlegar, where Poul would be keeping the plane.

Winter isn't usually the best time to fly into BC, especially the southern interior region, which gets a LOT of cloud and precipitation in winter. However, we kept our fingers crossed that we'd find a day that would work. And we didn't need much, either. The flight to Nelson would only take about 2.5 hours at CH250 speeds. The difficulty lay in the ever shortening daylight of November, and the quickly changing mountain winter weather.

To execute this trip I packed the winter survival kit I keep in my CH250. I bring enough food and water for two days, warm winter clothes, sterno and fire starter, flares, blankets and warm boots (I fly in running shoes). I had a backup handheld radio, two GPS's, iPad, paper maps, two rolls of toilet paper, and an extra large coffee to stay warm in case the airplane's heater didn't work. (It worked well by the way).

Normally I'd consider going high and going direct, but this wasn't a plane I was recently familiar with. Both Stu and I thought that flying near highways would be the better, safer choice.

Stu suggested following Highway 22 to the Crowsnest Pass, then basically tracking Highway 3 the rest of the way, even though the road significantly zigzags, through the region. We did plan a few shortcuts, though. The first was to bypass Sparwood and go direct from the Crowsnest to Fernie, fly over the Fernie ski hill, and pop out over the highway again by Galloway. There's a secondary highway to follow from the Crowsnest to Fernie, so I felt this was a fairly safe shortcut. The other shortcuts depended on being able to fly high enough to safely cut the corners on a few places where the highway makes those big zigs and zags north and south.

Stu planned to drive out to Nelson and I'd ride back with him. He'd get a head start early in the morning, and thus could text me the actual weather along the route.

Our first opportunity came on November 20th. The forecast was looking really good except for some early morning ground fog. Stu actually started out driving the day before, intending to stay with his folks in Castlegar. I got airborne at about 10 o'clock the morning of the 20th when the mountain valley fog was forecast to be gone. The weather conditions were good and showing improvement, and the forecast looked good so I was hoping we'd have success.

The first leg down Highway 22 to Cowley went very smoothly in a clear sky. I got some great pictures. Stu, who'd elected to stay in Cranbrook overnight, was on the road ahead of me. But he was reporting an overcast layer at about 6500' between Moyie Lake and Creston. It would still give me about 2500 or 3000 feet between the clouds and the valley floor. With that information I decided to fly at 10,500' over Fernie and then drop down until I got to Creston.



The view from the CH250 over Frank Slide at 10,500'. Clouds are visible in the Elk Valley just below the top of the photo.

By the time I reached Highway 3 at the Frank Slide I'd climbed to 10,500' and I could see the path to bypass Sparwood direct to Fernie, but not at 10,500. From my vantage point, it appeared the Elk Valley, where Fernie and Sparwood sit, was closed in with cloud. But what would look like when I got there?

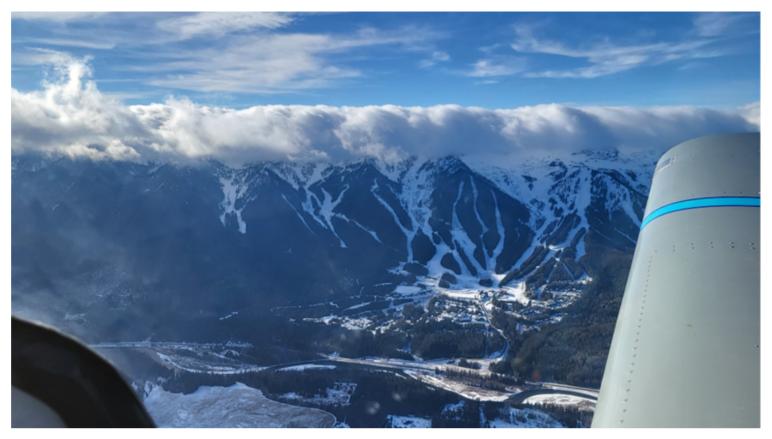
Continuing through the Crowsnest toward Sparwood, I right away realized I was going to have to get back down to get under the clouds. I started down to 8500'. By the time I got to 8500' I knew I'd need to be at 6500'. I turned the corner into the Elk Valley toward Fernie and saw a shallow but solid wall of cloud sitting atop the mountains that form the west side of the valley. I continued south along the valley, descending further in order to hopefully slip beneath the cloud and make it into the Columbia Valley at Elko.

When I reached the south end of the valley, where it veers sharply west, I was down to almost 5000' and I couldn't see around the corner through to Elko. I had two choices. I could continue on, hoping I didn't go IFR in the last few miles of the narrow westbound part of the valley, or I could turn around while I was still in the really wide portion of the north-south part of it.

The amount of red terrain on the Garmin 496 display cemented my decision to turn back and try another day.

I texted my plight to Stu as I made my way north backtoward Sparwood and the Crowsnest Pass. I made a quick stop in Pincher Creek to check fuel (I still had lots), file a new flight plan to home, and text Stu to say I was on my way back to Kirkby's.

11



The top of the west wall of the Elk Valley at the Fernie Ski Hill.

A few days later we were watching the weather and we decided Friday the 24th once again looked really good all the way through to Nelson. Lots of big H's on the GFA and no colored areas anywhere I wanted to fly. Stu started driving very early Friday morning and I was back in the air again at 10:30 with a fresh coffee and a fresh flight plan. Gary Abel was at home following my SPOT and sending me weather camera pics.

This trip was much better all the way through. There was virtually no cloud and I was able to pop over Fernie and head towards Cranbrook. There was a pretty solid layer of cloud just south of Cranbrook toward Moyie Lake, so I put in a bit of trim down and I started a descent to 6500 at 160 KTS. The cloud layer was very short lived and before I knew it I had clear sailing to the Kootenay Valley at Creston.



Looking North up the Columbia Valley over Wardner, BC. A very good day to be flying!

By this time I needed a new coffee and I was ahead of Stu, so I decided to land in Creston, top up the fuel, and check the weather for the last leg. Gary Abel sent me a picture of the plane from the airport camera. I used 47 litres in 1.7 hours of flying so the fuel burn was right on target. The terminal building in Creston looks like a hotel lobby. It's extremely clean, the bathroom is very well maintained, and Stu's Cavalier graces the magazine cover at the top of the pile in the pilots lounge. I think Stu probably put it there.



The CH250 taking a break at Creston. Note the patchy clouds hanging around partway up the mountainside.

There were a couple of options for how to fly the last leg to Nelson. I could fly north up the Kootenay Lake and turn west down the Slocan Valley, which would put me into Nelson about 22 miles later. Or, I could continue west along Highway 3 over the Kootenay Pass to Castlegar. From there it's north up the Slocan Valley, again for another 22 miles to Nelson. We decided Castlegar would be the better choice even though I'd have to fly a bit higher.

It was clear beneath a thin, patchy cloud layer, and the Castlegar airport came into view right on schedule. I did my radio calls, headed north up the Slocan Valley, and within a few minutes Nelson airport appeared around the corner. It's a very tight airport to get into but I did an extended downwind for runway 22, dodged the hotel near the threshold, and did a pretty decent landing.



Scooting along beneath a thin, patchy cloud layer over top of Castlegar

Poul was there with a few friends so I shut down and got my stuff unloaded. I was ahead of Stu so I was able to give the new owner and a couple of friends each a quick ride, demonstrate how to do a really bad landing for each of them, and get the plane parked, all before it got dark.



The CH250 parked at Nelson, BC, its new home base

This is definitely one of my more memorable flights. I flew into Nelson years ago in my Rans S12 with Stu and Barry Wood in their planes, and I was really glad to have another chance to go back. With the steep, narrow valley where it sits, the airport is one of the most challenging places that I've landed.

Next month I'll have an article detailing how Stu and I did the flight planning and what preparations are important for a mountain flight in the winter.

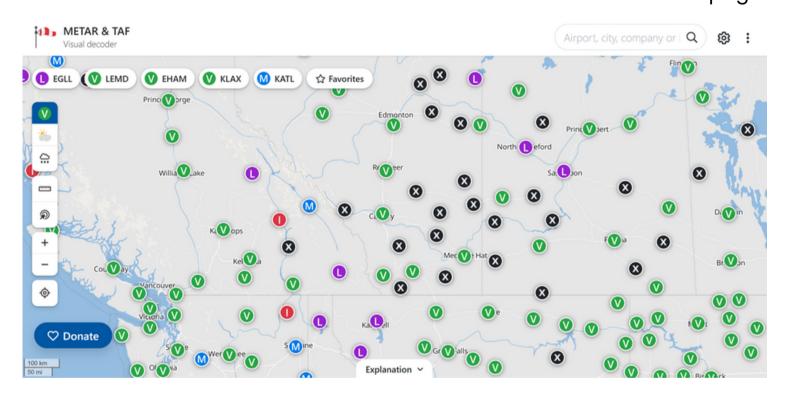




# TERRIFIC NEW AVIATION WEATHER WEBSITE & APP By Stu Simpson

I've discovered a new-to-me website for quick and accurate aviation weather! Users can look at a map and select the aviation weather at many more locations than are provided by Nav Canada's websites.

The site is www.metar-taf.com and here's a screenshot of the main page:



As you can see, there are dots of differing colors with letters in them. The coding works like this:

- Green V = VFR
- Blue M = Marginal VFR
- **Red I** = IFR
- Purple/Magenta L = Low IFR
- **Black X** = Unknown visual conditions, but known basic conditions such as wind speed & direction, temperature, and possibly altimeter setting, dew point and precipitation.

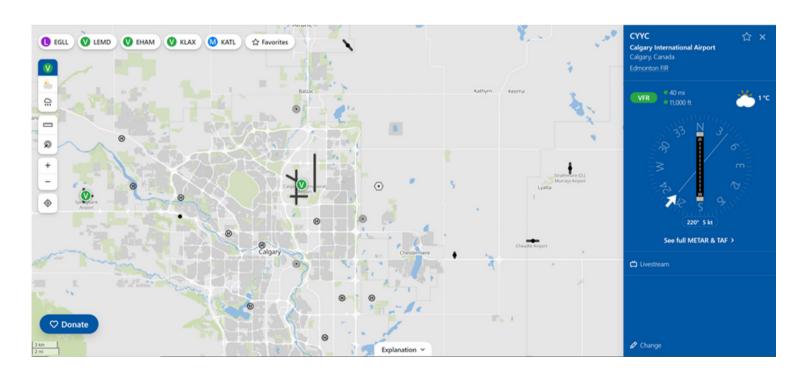
The left sidebar menu offers weather radar with the cloud and rain drops icon, and there's a distance measuring tool just below it. Clicking the "Explanation" button at the bottom of the page provides a ton of informative data.

Let's take a closer look. When you zoom in on the map, even more information appears in the form of small black dots and heliports, which are denoted by a circled **H**.

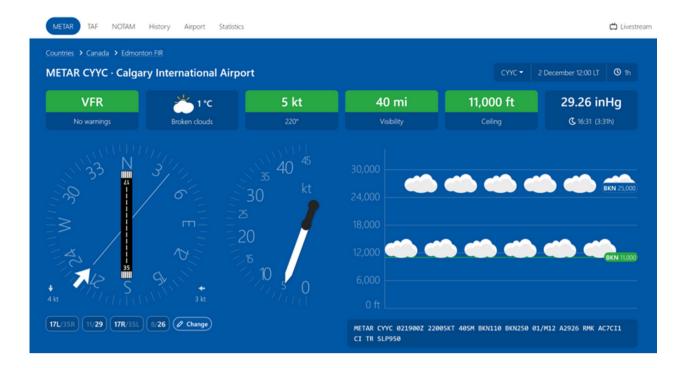
It's important to understand the limitations of the dots and heliports. They're most likely just local airports using weather info from the nearest airport with a METAR.

Some heliports actually have weather stations themselves that can offer some weather data.

If we zoom in and click on Calgary International, a side window pops up with basic info from YYC, such as wind, visibility, clouds and temperature.



Note that as you zoom in on the map, various airports show more clearly with their runway orientations displayed. Clicking on the compass rose on the side window brings up all the detailed weather info for YYC.



Now we have a fantastic visual representation of the most recent conditions at YYC. This display doesn't offer up the temperature/dew point spread, but that's easily found in the coded METAR just below, in this case 01/M12. You can scroll the page down and get all the relevant METAR data in both decoded text and tabular format.

At the top of the page there are buttons for TAF, NOTAM, History, Airport and Statistics. If you click on TAF it presents a wonderfully intuitive graphical display of the forecast weather for the station's forecast period in local time, not Zulu time. This negates the need for mental gymnastics to figure out the time difference to Zulu. You may need to use the subdued slider below the TAF table to get the full forecast if it extends beyond the time shown.



You can instantly access NOTAMS near the top left of the page. Near the top right corner there's the current station identifier with a drop down menu arrow. That shows a series of four nearby stations you can access.

As is typical of such sites and apps, metar-taf.com lacks graphical maps depicting fronts and systems. That's because that graphical information is copyrighted by Nav Canada and NOAA/FAA. It's still disappointing, though.

I'm a huge fan of making aviation weather simple and accessible. Presenting weather data graphically is just the easiest way to do that. This website offers up the best, most easily understood format that I've encountered.

The developers do offer an app which is available for a price on Android and iOS devices. Rather than pay for it, I've simply set a web icon on my phone's home screen. It works brilliantly on my phone and tablet, as well as my home computers. Since it's an adsupported site, you may want to consider using an ad blocker, which I've found works effectively.

There are lots more features of metar-taf.com that I haven't covered, so I urge you to explore the site and see if it's for you. I know that I'll be using it regularly from now on.



## PILOT TIP

## Set Pitch Trim in One Shot

### **Featuring Bruce Williams**

#### **Question:**

"My instructors always told me to 'trim off the control pressures,' but no matter how much I try, I feel like I never get the airplane perfectly in trim. What am I doing wrong?"

#### **Answer:**

Early in our flight training, most us learned a simple mantra for using trim: "Pitch ... Power ... Configuration ... Trim."

If you change pitch, power, or configuration, you affect airspeed (actually you affect AoA) and you need to adjust the elevator trim — *eventually*.

Unfortunately, we're often too quick to reach for the trim. If you trim before the airplane has settled at a new constant airspeed, you just need to trim again later. You end up making frequent, small adjustments and the airplane is never properly trimmed.



#### Here's a simple fix:

When you change pitch, power, or configuration, wait at least five seconds before you touch the elevator trim. If it helps, verbally or silently count to five (or even ten), and only then reach for the trim.

The key to using trim correctly is remembering that elevator trim is a secondary flight control, adjusted to relieve control pressures after the airplane has stabilized. Unless the change is temporary, such as when you make a small pitch change to recapture cruise altitude after updating the altimeter setting. In that case, you quickly return to the previously trimmed steady state.



The five-second rule might not always apply. For example, suppose you have trimmed the airplane at or near idle power with full flaps on final approach. The trim is set far into the nose-up range. If you add full power for a go-around, you must push forward on the yoke or stick to keep the nose from rising abruptly.

In this situation, it is helpful give the trim a quick nose-down swipe immediately after you add power to help manage the force required to hold the nose at the correct go-around attitude. You can fine-tune the trim after the airplane is climbing safely away from the runway and you have established the pitch attitude and configuration for a stable climb speed.

#### **Tip of the Week Courtesy PilotWorkshops**

## Brian's last word:

Once I get to cruise altitude I set my power, prop and lean as required. Only then do I level off, trim the aircraft once it has settled down and neutralize the control forces with trim. It doesn't take very long and once the aircraft is nicely trimmed. I engage the autopilot if I want. If I'm on a longer flight (ie cross-country) I'll use the A/P. If I'm just bombing around with the Carstairs Crew, etc I'll hand fly.



April 24, 1937 - November 17, 2023

It is with deep sadness that the family of Graham Millington of Vulcan, AB, announce his sudden passing at home on November 17, 2023, at the age of 86 years. Graham was a long time club member and is remembered very fondly by many.

Graham's aviation journey began with his childhood passion for flying. In his earlier years, he served in the Royal Canadian Air Force. As a bush pilot, he flew across northern Canada and the Canadian Arctic Circle, all the way down to California and Louisiana, where he flew both with Los Angeles Airways, and Bullock Helicopters, transporting people to and from Grand Isle, Louisiana to offshore oil platforms.

By all accounts, as a club member, he was quite active and spent time working on and flying his personal aircrafts, like his Minimax pictured above.

Graham was a very multi-faceted individual and you can read more on his life in the Obituary linked below.

A Celebration of Life will be held in Vulcan on December 9th, 2023 at 1:00 pm at the Royal Canadian Legion Branch 21 (240 Sinclair Road, Vulcan AB)

https://vulcanadvocate.remembering.ca/obituary/graham-millington-1089105978

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**Brian Byl** 

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