

January 2016



Richard's beautiful Stinson patiently waiting while it's owner enjoys Country Cousin's Cafe
Next Meeting Wednesday Jan 13th at the AeroSpace Museum

Monthly Newsletter of the Calgary Recreational & Ultralight Flying Club – COPA Flight 114
Our Mission: To promote safety and camaraderie amongst aviation enthusiasts.

President's Message

By Ed D'Antoni

On January 1 2015 I was up before dawn, out to Stefanic Field and in the air at 8:15, about 15 minutes before sunrise. My Dash Camera picked up some great city lights. So far this year the weather here has been great for flying however my SportStar is in Calgary not here with me in Victoria BC. I will miss the January and probably February meetings but hopefully can start contributing to the club after that. I would like to thank Bashar Hussien for the great job he did presiding over club meetings for the last two years, and to Norm Vienneau for taking on the task of being a one man nominating committee to ensure we have a complete executive for the next year. I would also like to thank outgoing directors Ken Taylor for his thankless job as treasurer for the last 4 vears and Carl Forman for his latest term as Secretary. It is exciting to see Bashar's enthusiasm for his new flight school. I am sure his idea of group aircraft ownership for training and flying will be a success. My introduction to Ultralight flying was similar to what Bashar is promoting. Twenty some years ago I ran into an exuberant ultralight flying student, Wilf Stark. At the time I owned a Cessna 172. Wilf had purchased a Rans S-12 kit, which was going to be built by Bev Befus the then owner of Blue Yonder Aircraft. Bev planned on using the S-12 in his flight school. Things went awry and Wilf was left with the S-12 Kit. I knew Wilf never had time to build the kit so I offered to be a 50/50 partner and build the aircraft myself. An Aeronautical Engineering instructor, Barry Halliwell later volunteered to be a partner. We obtained space in an Engineering Laboratory in SE Calgary and started construction. Barry had a large poster of the S-12 on his office wall. Another Instructor, Don Ward, also a Mechanical Engineer and retired Air Force Hercules pilot used to look at the picture with distain. One day Don asked Barry if it would be okay to take his structural design class to look at out project. I suspect Don was going to use this as an example of something not good.

The next day Don said to Barry "that is a real airplane" would vou like another partner. We had a great time building the aircraft. We worked at least 12 hours every Sunday, our wives usually bringing us a meal around noon. Don and I also worked at least 5 hours every Wednesday. We had two sets of tools. Don and I would work until we misplaced every one of them, and then go home. Wilf was mostly out of town on business and seldom able to make a work party. Somehow Wilf always managed to get to the Lab and clean up our mess, finding and putting all of the tools in their rightful place. We had received the kit in February and its first flight was in August of the same year. The only aircraft rules we had were that no matter who did what damage we would all share in the repair cost and that if one of us had an incident that may have caused damage it was to be reported to all the other owners. In the 5 years we

Calgary Recreational and Ultralight Flying Club

COPA Flight 114

Meetings are held on the second Wednesday of every month, except July and August, starting 7:00 PM at the Aerospace Museum, 4629 McCall Way NE Calgary.

President: Ed D'Antoni

Vice-President:

Bashar Hussien bashar.hussien@shaw.ca

Secretary:

Treasurer: Brian Byl

Directors:

John Kerr 403 714 0446 oreal_kerr@hotmail.com Barry Wood (403) 935-4609 barryleewood@hotmail.com Bashar Husien Past President

Web site: www.crufc.org Skywriter

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Editor: Norm Vienneau (587) 225-3944 crufcnews@gmail.com

owned the aircraft, only once did someone show up to find the aircraft gone. I am sure that any future group owners as Bashar is promoting will have as great a time learning to fly, owning and flying as we did.

Notes from the Editor

Flying weather what is good flying weather, and where and how do we find it?
Recently Stu has put calls out to take to the air and twice had to call off the day's flight. Winds at Chestemere were howling while to the north at Carstairs it was fairly calm and quite flyable. There have been days I have left Airdrie to go to the field at Carstairs and while it was nice and calm at Airdrie the wind was blowing hard at the airstrip. I have also had the reverse happen.

At the end of December I was at my hanger working on the plane with the doors open to allow the Sun to warm my workspace. It was a beautiful calm day. I heard a plane taxi to my hanger and looked up to see Jim Corner and his trusty Kitfox. Jim mentioned that it seemed so nice and calm on the ground but at altitude the winds were 30 to 40 mph. It is odd how things can change so dramatically in 1000 ft. Seems we can't see how the air moves but we can feel it. The same day an Air Canada flight enroute to Toronto made an emergency landing at YYC due to clear air turbulence. Fifteen ambulances were needed to transport the injured to hospital. Luckily we don't seem to encounter that level of turbulence at the altitudes we fly, and we can often change the smoothness of our ride just but climbing or descending a thousand or so feet. There have been times I have been flying out

of Red Deer and the tower has warned of possible wake turbulence. I have mostly dismissed it but recently I ran across a video of an Antonov An2 departing a country strip a half a minute ahead of a small plane. The small plane then crashed on take-off from the wake turbulence. The video has given me a new respect for air currents.

https://www.youtube.com/watch?v=rFVdlyaA-rc

The video also shows tests done at altitude and when a small plane flys into the wake of the An2 the small plane is immediately thrown into a loss of control situation.

As you know when flying with your buddies if you cross behind their aircraft you will feel a bump as you cross their path. Just don't cross behind an An2.

Remember there is an AN2 that flys out of Airdrie and has flown into small strips that we visit with our light aircraft. Take care out there. I want to thank Stu Simpson for his continuing contributions to the Skywriter and I want to encourage you to submit pictures for publication. I think pictures make the Skywriter more interesting.



Flying back from Red Deer with Jim Corner on my wing.



The crew from Carstairs on the ground at Linden

Selling a Plane? Here's Some Help by Stu Simpson

A friend of mine, whom I'll call Tom (not his real name) recently put his aircraft up for sale. It's a good airplane, reasonably priced, and dates from the late 1990s.

I got involved peripherally when I referred a potential buyer to Tom. The deal never went through, but over the course of the negotiations Tom sought my advice on several occasions. Of course, I was happy to offer any insight I could since Tom's quite inexperienced at buying and selling airplanes. We all are until we've done it a few times.

There's plenty of advice out there on how to buy an airplane, but not as much on selling one. I thought I would summarize Tom's and my exchanges and offer my experience on selling recreational airplanes to anyone who might find it useful.

I've sold five airplanes in my airplane ownership career of 25 years, and not one of them was easy, but they all sold. The four biggest factors that determine who quickly your plane will sell are:

How saleable the airplane is. It's true, some airplanes are easier to sell than others. A twoplace airplane that can carry passengers, in any registration category, is much more attractive than a single-seater. Period. Side-by-side seating sells more quickly than tandem seating. Period. We pilots simply love to share our flying with others. Very specialized or niche airplanes, such as super STOL types or aerobatic planes can also be tough to move from your hangar. Selling a plane is a matter of timing and there's only a little we can do about that. For instance, it's tough as hell to sell a plane in the late fall and winter months in Canada. No big mystery there. And on top of that, the right buyer has to see it at the right time. That's something a seller can't control but can influence. More on that later.

Selling an airplane takes patience, especially when it comes to recreational aircraft.

Advertise, of course, but other than having everything ready to respond when you have an inquiry on the plane, there's nothing else you

can do. Airplanes are specialty items and it's a relatively small buyer's market.

Price. A smart buyer will have a budget or a price range that works for them, and if your plane fits in that budget, and it's what he's looking for, and if he knows about your plane, you might have a chance. Tough economic times mean fewer dollars to spend on toys. Ironically, a strong economy can also be a hindrance to selling recreational planes since buyers may have more disposable cash on hand and want to spend it on higher end aircraft.

Advertise. Start with your local flying club and maybe neighbouring ones. Also make up posters including clear large photos of the plane plus your contact information, and post them at every airport you can get to. Leave at least one in your plane and have it visible in a window anytime your plane is on a ramp somewhere. You might just reaching the guy who buys your plane.

Advertise online. Here is a list of sites that I've used or accessed in the past.

www.barnstormers.com By far, the most response activity comes from here.

www.tvsac.net The Thompson Valley Sport Aircraft Club in Kamloops. Free and also very widely accessed.

www.copanational.org COPA, you should be a member anyway.

www.upac.ca The Ultralight Pilots Association of Canada. Free advertising and a really good classifieds section for more than just ULs, too. www.producer.com The Western Producer, a long-time farm and ag magazine. A lot of farmers fly.

www.kijiji.com I've no experience with this site but others have had good luck with it. Type-specific forums that cater to a given make or series of airplanes. www.vansairforce.com is a good example.

There are other aircraft classified ad sites out there so a bit of research will help you decide if they're right for the plane you're selling.

Once you've placed your ads, be ready for inquiries (educate yourself on what a scam

looks like) and to send a sales package about your plane.

Your sales package should include a very detailed document about the plane. No detail is too small to include. Cover all the following things:

The plane's history, right from the kit and where it came from. Include who built it, when it was granted a permit to fly, and where that all happened. Include any info on the builder(s), like if he or she was an aircraft engineer, an experienced builder and this was their third or fourth plane; that sort of thing. This speaks to the plane's overall integrity and the depth of its history.

Cover the maintenance and/or upgrade history. Include things like instruments, radios, prop, engine changes and major engine or airframe work. Talk about who did the work, especially if it was a professional or very experienced amateur. Again, this information adds value and credibility to the plane and to you as an honest seller for providing it.

Talk about how the aircraft has been kept. Has it always been hangared, lived in a dry climate or kept in a heated or dry hangar?

How has the airplane been used? Has it been used in a flight school, or just for personal use? How often has it been flown? Sitting idle is very hard on a plane. The log books will show the periods of inactivity so be prepared to address that if you have to.

Talk about the quality of the log keeping. That can add a lot of value and confidence for a buyer.

Talk about any current maintenance issues. When was the last annual done and who did it? Anything a buyer will want to know about such as the fabric, engine condition or any corrosion issues, should be addressed in your document. Again, this shows your honesty and it narrows down your buyer list. No reasonable buyer expects an older and well-used plane to be in factory new condition. If they do, and I've dealt with idiots like that, they're going to waste both your time and theirs.

Talk about the flying characteristics. How does it fly? For example, do you have to lead a turn slightly with rudder; what is the takeoff distance and climb rate at various configurations, temperatures and runway/field surfaces? Talk

about your experience with its special capabilities like STOL or aerobatics, its ruggedness, comfort and load carrying. If it's relevant, highlight the fact that it can carry two people, and if it's a homebuilt and that an owner can do their own maintenance. Conversely, if the plane is a basic ultralight, mention that, too, and the fact it cannot legally carry a passenger. All the planes I've sold have been ULs and making this point to a potential buyer up front has saved me, and them, no end of time and grief if they were looking for something to take up a buddy. Better to make all that clear early on.

If the plane has a Rotax 912 series engine, some people looking at your ads will have little or no experience with it. This is especially true of older pilots who are stepping down from heavier iron to something a little more affordable. Inform them that it is a 4-stroke engine with every bit of reliability and longevity as a Continental or Lycoming, but with lighter weight and better fuel efficiency. Highlight the fact that a version of the 912 is used in military drones and that parts are easily available. Talk about how much fun your plane is to fly and what you can do with it. Give examples of your airplane type's capabilities. For instance, when I sold my Merlin, I bragged about how I flew it to San Francisco and back, as well as to so many other places. It really made an impact. Also direct them to links on Youtube. I did this for my Merlin sales pitch and highlighted Andy Gustafson's airplane videos as well as my own. You'll be e-mailing this document, so it's easy to copy and paste the links into the document. Also address why you're selling the plane. Everyone has a different reason. There may be changes in your life or financial situation. Perhaps you want to move on to a different airplane. Maybe you're just not flying it enough and don't want to see such a good plane sit idle. Your reasons are your own, and you don't have to go into private details, but a buyer is definitely going to ask.

Include lots of photos in your document that show detail. Small, hard to see pictures will just mean a potential buyer will ask you for better ones, which will eat up more of your time and cause concerns about your credibility. If you don't know how to include photos in a document, or how to e-mail them with the

document, find someone to help you with it. Quite frankly, buyers very much expect emailed photos to be available right away. Talk about your pricing and how negotiable it is or isn't. Be up front about your thoughts on people trying to low-ball you. That will weed out a bunch of jerks right off the top.

Remember, a deficiency in the airplane is not necessarily a deal breaker. It may provide room for negotiation, but being up front about it speaks volumes about your honesty in the deal and inspires so much more confidence in a buyer. That's absolutely crucial in selling an airplane.

The whole point of this document is to try and answer up front all the questions a prospective buyer will have. You need to be open and honest about the plane right from the start because if it comes out later that something was hidden or misrepresented a couple of things will happen. One, you lose credibility, and you won't get it back. Two, the buyer will be scared wondering what else is not being made clear. And three, you will both have wasted a lot of time. Besides, if you're honest you don't have to remember anything but the truth, which is easy.

It can take a while to put all this together, but it's very well worth it and it actually allows you to take much better stock of the airplane, too. It's surprising how valuable that can be when you're selling a plane.

A buyer may want a pre-purchase inspection. You may consider paying for this yourself and including it in the price of the plane. That way, it's already done and saves a lot of time. Highlight this fact in your sales document and make sure it's done by a professional who can be accessible to a buyer when he wants to talk to him. Try and choose an engineer that knows the plane well.

When you have an inquiry on the plane simply send this pre-packaged document. The person inquiring will read it and will be impressed at your level of thoroughness and preparedness, as well as the amount of information you provide. Then, they'll either be further

interested or not. Either way, you've saved yourself a whole bunch of time and helped narrow down the field of potential buyers quite well.

The buyer will then contact you again if they want to confirm something, have more questions, or wants to see the plane and/or go for a ride. Then you can take it from there.





Couple of shots from my brother in law's Drone Camera. Interesting and different perspective.

Flying by Feel

by Stu Simpson

Flight instruments. We need them, or do we, really?

In Canada, there's no legal requirement for an ultralight aircraft to have any instruments by which to fly. That's an interesting notion, since that rule was put in place back in the 80's when the ultralights of the day simply didn't have any place where they could mount instruments. Most ULs at that time were similar to the much revered Lazair; largely open-air, and there was no more protection than a helmet, goggles and a leather jacket. Big bugs were the biggest hazard.

I acquired my first aircraft, a Spectrum Beaver, in the early 90s and flew it for a couple of years with only two instruments. One was a tachometer that was - and I kid you not - duct taped to the fiberglass wind fairing near my feet.

The other was a Hall Brothers airspeed indicator clamped to a cockpit support tube. This ASI was simply an 8" high clear plastic tube with graduated speed markings in 10 mph increments. It had a small pitot hole in the bottom and a vent hole on the top. Forward speed forced the airstream into the pitot and lifted a small disk on a central rod. You divined airspeed from the 10 mph mark the disk hovered closest to. At this writing it has not been certified for IFR use.

There was a yaw string atop the fairing, too, but does that qualify as an actual instrument? Flying then was done almost completely by feel and sight. It was largely inaccurate, of course, especially without an altimeter. But I'd learned what things looked like from about 1000' AGL and was able to stay clear of Calgary's class C floor.

I learned a lot about flying in those years, and it was markedly different from what pilots learn in planes with more gauges. I learned to listen to my airplane, to know I was yawing when the wind hit me on the side of the helmet, to sense what the Beaver was doing without any dials there to tell me. I learned to fly by feel. And those lessons have served me well in my flying career.

Aviation's pioneering airplanes also had no instruments, which evoked the term 'flying by the seat of your pants'. It meant you judged what the plane was doing by how it felt in your bottom. Early ultralight flying, essentially aviation having come full circle, is as direct a comparison as you can get to flight in the early 1900s.

Ultralights have long since evolved into proper and capable aircraft but the instrumentation rule still stands. I don't know if that's good or bad.

As my flying has evolved, so have my airplanes and so have their instrument panels. My Cavalier is the most complex plane I've owned. The panel sports a Dynon EFIS, two GPS units, an extra ASI and altimeter, a quad engine gauge, ammeter, fuel pressure, carb temperature, back-up oil pressure, tachometer, radio, transponder and even an autopilot. Plus, there are all the switches, circuit breakers and controls for the plane.

As you can imagine, the back side of the panel is something akin to the jungles of Borneo, lacking only a babbling brook and howling monkeys. It's an easy place to get lost and I've often been tempted to hack at it with a machete.

We all know that flight instruments serve many purposes and add immensely to aviation safety and aircraft capability. But what happens when the instruments don't work? Can a pilot continue to fly safely, and equally important,

can he or she land safely without reference to the instruments?

I always wondered about that very question. One summer day I had the opportunity to learn my own answer when I lost all my flight instrument information without warning.

I'd flown the previous day from Chestermere-Kirkby Field to Castlegar for an overnight stay with my folks. Heading home on a pristine summer morning, north of Cranbrook in the Columbia Valley, my Dynon EFIS went black. It was my primary flight instrument that fed me airspeed, altitude, horizon, vertical speed, turn and bank and heading information.

I tried everything possible to get it working again, but it remained lifeless. Fortunately, the laws of physics hadn't changed any and I was still flying. Fuel still flowed and the engine was running just fine. Plus, I had two GPS's, a map and perfect weather. My satellite receivers both display ground speed and altitude so I had the crucial information I needed to continue on safely. At the time I did not have the back-up ASI or altimeter.

All this put me in a pretty good position. The next available was Invermere, about 40 miles away, less than 20 minutes in the Cav. Should I land and try to fix the problem, or continue on to home? I decided I should land in case the dead Dynon indicated a deeper electrical fault. I didn't want to deal with something like that over mountainous terrain.

But it meant landing at an unfamiliar (not completely unknown) airport, with no direct airspeed readout. Could I do so safely? I reckoned I could.

As I did in my Beaver, I have pretty good skills in feeling what my Cavalier is doing, skills that improve as I get more experience with it.

I know the Cav's RPM just by the engine noise and how the prop looks. I can deduce airspeed

from the engine sound, cockpit noise and control feel, and on approach by the visual ground speed. I can often tell if I'm climbing or descending just by a glance at the wing's angle of attack, and the feel in seat of my pants. Frequently, but less accurately, I can also discern altitude from a look out the window.

Thus, my landing at Invermere was absolutely a non-event. I flew the approach by feel and sound, and according to GPS, just a touch fast.

I couldn't fix or even locate the fault on the EFIS and it was clear there was no other fault in the electrical system. I did have another dilemma, though. Should I continue on to home?

I weighed all the important factors. First, could I safely fly the plane with the instruments I had available? I'd answered that question already by the simple fact of the effortless flight to, and landing at, Invermere. What about the weather? It was great; a clear sky and a very light wind at my current location, and along the route home. Nav Canada posts forecasts for Calgary every three hours, adding to my confidence in the weather predictions. I wasn't working with old forecast data.

The airplane was otherwise sound, I had lots of fuel and two additional sources of speed and altitude information.

Had the winds been strong or gusty I wouldn't have flown on. Discerning airspeed from GPS alone in steady, light or calm winds is one thing. Doing so with strong gusts could be quite another, leading to larger disparities between perception and reality. The same applies to cloud height and visibility. Had there been low cloud or questionable vis, I'd have taken a bus home.

My flight to Kirkby's was a beautiful flight through the Rocks. There's only one point of note. Leaving the Bow Valley put me pretty close to Springbank airport's control areas.

There's not a lot of space between the hilly terrain and the controlled airspace. I was unsure of how accurate the GPS altitude was and I didn't want to bust into controlled airspace unannounced and unwanted.

Thus, I called Calgary Terminal, which governs the airspace outside of YBW's control zone and asked for vectors. I let the controller know my altimeter was unserviceable and that I was flying by GPS altitude alone. The controller appreciated my heads-up to him and remarked that my GPS appeared to bang on for height. There was no trouble getting vectors to the east side of Calgary, where I dropped beneath the class C floor and headed on to Kirkby's a few minutes away. Once again, I landed the Cav without any trouble at all.

The whole incident drove home to me a number of important points. First, fly the plane. My EFIS broke, but nothing changed to affect the Cav's ability to fly safely. It pays to know your airplane and especially how to fly it safely when problems arise. Know how the airplane really feels in crucial aspects of flight. Practice partial panel flying with an instructor. Had I been less familiar with the Cav I'd not have continued from Invermere without repairs.

Weigh ALL the factors that affect your flight each time you fly. Had the weather been less than perfect, or the Cav been any less capable, such as only having one GPS, I likely would have stayed on the ground. The same goes for whether or not I was up to flying the airplane safely without the EFIS.

Don't be shy to ask for help. My decision to contact Terminal and to tell them the score was a great move that really enhanced my safety and others' on a busy day in crowded airspace. I've also since installed a back-up ASI and altimeter.

There's one last thing to tell you. I contacted Dynon about the broken EFIS. They responded wonderfully and had another one in the mail for me the next day, based on me returning mine for repairs. The re-conditioned one I received has performed flawlessly since installation, and it's under a new full warranty that began upon my receipt of the instrument. I would readily purchase Dynon products in the future.



Here is a tech tip from Stu

Recently when Stu had to adjust the tension on his engine's alternator he came up with a unique solution. In order to give himself two hands to adjust and tighten the bolts he looped a tie-down strap over the alternator, as shown in the photo and used it as a foot strap. Using his foot to pull the alternator into the correctly tensioned position.

His hands were then free to tighten the nut and bolt. Nice Job Stu.

FOR SALE



2005 Challenger II, AULA, 220 TTSN, Rotax 503, DCDI. Full instrument panel incl. vert. compass, ball, ASI, AI, VSI, tach, EGT, CHT, fuel, voltage, GPS, radio, intercom. Throttle quadrant. Custom seats. 15 USG fuel tank. Heater. Always hangared. \$23,000. For more information, contact Ken Taylor at 403-863-2157 or ktaylor2157@gmail.com (02/15)

Lycoming O-320-D3G, 160 hp engine, 0 SMOH, Certified engine overhauled in 2001 by Signature engines. All accessories except magnetos and alternator. Dynafocal mounts, includes exhaust system. \$12,000 OBO. please contact Ken Beanlands at (403)295-2079 or kbeanlan@telus.net (03/15)

EA81 Aircraft Engine For Sale. 100 HP. 2.2 to 1 belt redrive by Reductions. Leburg electronic ignition. I have a second Leburg ignition so it can be dualled. Ran with Aeroconversions Aerocarb. Manuals for everything. Stratus Stainless steel muffler and exhaust. Custom rad with AN-20 fittings and braided stainless hoses. Engine mount fits a Kitfox IV. Very low hours. Please Contact Tim Vader at vadert@shaw.ca or 403 620-3848

KR2 For Sale: NOT AN OLD FARTS AIRPLANE! Air frame TT 30 hours. Engine Continental A 65/75 TSMOH 970, No Electrics, No Electronics \$12,000.00 OBO. Glen Clarke 403-279-1036 clarkegk@telus.net

Indoor Hangar Space available to be shared at Springbank Airport – complete with heat, electrical and water - Bathroom, Kitchen, Wifi, Alarm system and digital video recording. Email: emailabellamario@gmail.com or call at Mario 403 354-8967 for more details

Suzuki 1.3 litre 4cyl auto engine with gearbox for aircraft use. Call 587-225-3944 and talk to Norm for more information Email normrdt@gmail.com

70 X38 Richter Propeller for a Rotax 912 pusher. Wood prop in excellent shape from a 80hp SeaRay. Offers? Call Bert Lougheed at 403-350-5511

7LYMG EVENTS

Please note the Olds/Didsbury flying club and the Three Hills flying club usually serve donuts and coffee on Saturday mornings with each taking alternate weekends. Dennis Fox from Three Hills has more information on this.

Mark your calendar for the third Saturday of every month, to fly to CEK6 for coffee

Flagstaff Regional Airport (formerly Killam/Sedgewick) CEK6 Card lock fuel available 24 hours/day Courtesy vehicle on site

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