

The CAB Boys

FORMATION FLYING - HOW IT'S DONE

PLANE SAVERS
COPA FLIGHT INTERVIEWS
MIKEY MCBRYAN

WEATHER BRIEFINGS
HEAR IT FROM
THE PROS

HIGH SIERRA FLY-IN
NEVADA EVENT DRAWS
CANADIAN PILOTS





his

Pour lui

hers

Pour elle

RED CANOE & COPA



CAPTURE THE FEELING OF FLIGHT.

In Canada, the freedom to fly provides pilots and aviation enthusiasts endless ways of expressing our love for flight.

Recognizing this, COPA and Red Canoe came together to create a high quality collection meant to capture and celebrate just a few of those ways.

Shop for yours today: www.copanational.org/en/store

COPA

1952

TO ADVANCE, PROMOTE, AND PRESERVE THE CANADIAN FREEDOM TO FLY.

L'ESSENTIEL, C'EST LE CIEL!

Au Canada, cette vérité offre aux pilotes et aux passionnés d'aviation plein de moyens pour exprimer leur amour de voler.

C'est pourquoi COPA et Red Canoe s'associent pour pour créer une collection d'excellente qualité, destinée à rendre hommage à quelques-uns de ces moyens.

> Trouvez le vôtre aujourd'hui: www.copanational.org/fr/boutique

COPA



1952

FAIRE PROGRESSER, PROMOUVOIR ET PRÉSERVER LA LIBERTÉ CANADIENNE DE VOLER.

CONTENTS



FEATURE

THE CAB BOYS

Former military and retired corporate pilot Michel Pomerleau is an experienced formation pilot and the leader of the CAB Boys formation team, all members of the Club COPA 46 — Club Aéronautique de Beauce (from which the acronym CAB is derived). The COPA Flight and the CAB Boys are based at the St. Georges airport (CYSG) in southeastern Quebec. In this issue, Pomerleau takes us step-by-step through the complex manoeuvres that formation flying entails.

ON THE COVER: There is a strong attraction among many pilots to fly in formation with others. On the cover this month, Kirsten Mann captures a great shot of a Cessna 182 flying alongside husband Carter and their Nanchang CJ-6.

DEPARTMENTS

4 PRESIDENT'S CORNER

THE ADVOCACY YOU DON'T HEAR ABOUT

6 MAILBOX

IS COPA NATIONAL SUPPORTING US?

7 NEWSLINE

COPA'S NEW OPERATIONS DIRECTOR

10 INCIDENTS AND ACCIDENTS

A BRIEF COMPILATION FROM RECENT TCCA REPORTS

13 ALL FOR FLIGHT

COPA FLIGHT 201 SEES RAPID GROWTH

14 FLY SAFE

OBTAIN WEATHER BRIEFINGS FROM THE PROS

16 YOUNGER VOICES

PILOT ANNIE TAKES US TO THE HIGH SIERRA FI Y-IN

18 AVIATION ACCESSORIES

GLASS-BASED POWERPLANT MANAGEMENT

26 REGIONS

LOCAL NEWS AND MEMBER ACTIVITIES

31 ON THE HORIZON

MARK YOUR CALENDARS

34 BOOKSHELF

BOOKS BY CANADIAN AUTHORS ABOUT CANADIAN AVIATION

COPA Flight



EDITOR Steve Drinkwater steve@copaflight.ca 604.229.1629

CONTRIBUTING EDITOR Russ Niles

GRAPHIC DESIGNER Shannon Swanson

DISPLAY ADVERTISING SALES Katherine Kiaer 250.592.5331 katherine@copaflight.ca

CLASSIFIED ADVERTISING SALES & PRODUCTION Roberta Drinkwater 1.800.656.7598 admin@copaflight.ca

ACCOUNTS RECEIVABLE Diana Topping 604.339.3612

FINANCIAL CONTROLLER Anthea Williams ASSISTANT ADMIN Rajei Gill

COPA Flight is published under contract to COPA by Canadian Aviator Publishing Ltd.





COPA BOARD OF DIRECTORS

B.C. & Yukon David Black 604-351-6851, dblack@copanational.org

Kate Klassen kklassen@copanational.org, 604-366-8211

Alberta & N.W.T. Bram Tilroe, Western Vice-Chair 780-986-2601, btilroe@copanational.org

Larry Biever (403) 651-3048, Ibiever@copanational.org

Saskatchewan Shane Armstrong, Chair 306-370-1440, sarmstrong@copanational.org

Manitoba & Nunavut Jim Bell, Secretary 204-293-5402, jbell@copanational.org

Northern Ontario Lloyd Richards 705-267-7111, Irichards@copanational.org

Southern Ontario Kevin Elwood 705-444-9461, kelwood@copanational.org

Doug Ronan 705-327-4730, dronan@copanational.org

Clark Morawetz 905-809-4835, cmorawetz@copanational.org

Québec

Jonathan Beauchesne, Treasurer 514-585-3959, jbeauchesne@copanational.org

Mathieu Delorme 514-248-5379, mdelorme@copanational.org

Atlantic

Bill Mahoney, Eastern Vice-Chair 709-685-6885, bmahoney@copanational.org

Maritimes Brian Pound 902-652-2822, bpound@copanational.org

Debbie Brekelmans

902-499-7941, dbrekelmans@copanational.org Ex-Officio

Bernard Gervais, CEO and President 613-236-4901, bgervais@copanational.org

Canadian Owners and Pilots Association 75 Albert Street, Suite 903. Ottawa, ON K1P 5E7 613-236-4901 | www.copanational.org Find us on Facebook and Instagram @copanational 🚺 💆 #allforflight

> COPA Members \$15 per year Non-Members \$30 per year Single Copy Price \$4.95 (includes mailing in Canada)







COPA **AT WORK** THE ADVOCACY YOU DON'T HEAR ABOUT

Recently I have had a few exchanges with some members about not sharing enough of what we do, or what we have done, for you the member. So, let me explain what we do and, more importantly, how we do it. (You can also read my October 2017 column, available on our website. It talks about advocacy.)

Not everything we do is public or made public, as you would expect. A lot is done one-on-one with the appropriate individuals, sometimes formally, sometimes not. Pushing the right buttons, talking with the right person at the right time, making sure we have a friendly ear that can listen to us and vice-versa, are all part of our methodology. So is working with other associations that are close to us, and speaking up together. It's what lobbying is all about. It is the end result that counts and it is not always in our collective best interest to share at large the tactics during the process.

A prime example being cited is the Buttonville airport (CYKZ) tower closure. In the CYKZ case, I agree that we may not have talked enough about the efforts COPA put in, so I invite you to turn to the Letters to the Editor section in this issue where you can find more details. We always look for the best outcome for the association and the collectivity; in other words, we need to pick our battles.

COPA is regularly consulted by the regulator (Transport Canada) and Nav

Canada on just about every issue that concerns GA in the country before anything moves. Rarely does anything go out that we don't know of or have not been consulted about. Our goal is to take a national stance on issues and for our Flights and local members to be able to apply it locally.

Other examples we have been working on for a long time on are the ADS-B mandate, maintenance issues, owner maintenance questions, recreational pilot and reciprocity with the U.S. and their special BasicMed medicals that are not allowed here in Canada. Harmonizing seminars and rust removers across the country is another example. In other words, there is lots and lots of work going on. If you have any guestions, please give me a call or write me at bgervais@copanational.org.

ALL FOR FLIGHT STORIES

We have received a few stories that convey the joy, that feeling of being up there, that drives us: All For Flight. Please keep them coming; send them to steve@copaflight.ca.

SEASON'S GREETINGS

Why not enjoy the winter flying season at its best by giving yourself the gift of 'safety' for under \$100? Go for a flight with an instructor; it'll be money well spent.

Wishing everyone the best during this holiday period, I encourage you to take the time for you and yours, to rest and enjoy the season. See you in 2020!

www.basinc-aeromod.com

COPA AU TRAVAIL LE TRAVAIL EN COULISSE

J'ai récemment eu quelques échanges avec certains membres nous reprochant de ne pas assez partager de ce que nous faisions, ou ce que nous avons fait pour vous. Alors, permettezmoi d'expliquer ce que nous faisons et surtout, comment nous le faisons (vous pouvez également lire mon mot d'octobre 2017, disponible sur notre site. Il parle de défense d'intérêts).

Tout ce que nous faisons n'est pas public ou publié, comme on peut s'y attendre. On fait beaucoup de choses en tête-à-tête avec les personnes appropriées, parfois formellement, parfois non. On arrive à nos fins en poussant sur les bons boutons, en parlant avec la bonne personne au bon moment, on s'assure ainsi d'avoir une oreille amicale qui peut nous écouter et vice et versa. Il en va de même lorsque nous travaillons avec d'autres associations qui sont proches de nous et avec qui nous nous exprimons, ensemble. C'est ça, le lobbying. C'est le résultat final qui compte et il n'est pas toujours dans notre intérêt collectif de partager à tous vents nos tactiques pendant le processus.

Un excellent exemple cité est la fermeture de la tour de l'aéroport de Buttonville (CYKZ). Dans le cas de CYKZ. je suis d'accord que nous n'avons peutêtre pas assez parlé des efforts de la COPA, alors je vous invite à lire la section des Lettres à l'éditeur dans ce numéro où je donne plus de détails sur nos démarches. On cherche toujours le meilleur résultat pour l'association et pour la collectivité : en d'autres termes. nous devons choisir nos batailles.

La COPA est régulièrement consultée par le régulateur (Transports Canada) et Nav Canada sur à peu près

toutes les questions qui concernent l'aviation générale au pays, avant que cela ne devienne public. Il est rare que quelque chose se manifeste sans que nous le sachions ou n'ayons été consultés. Notre objectif est de prendre une position nationale sur les enjeux afin que nos Clubs et membres soient en mesure de l'appliquer localement.

D'autres exemples sur lesquels nous travaillons depuis longtemps sont : le mandat ADS-B, les questions de maintenance, l'entretien par le propriétaire, le pilotage récréatif et la réciprocité avec les É-U et leur médical BasicMed qui n'est pas autorisé ici au Canada. L'harmonisation des mises à jour des connaissances à travers le pays en est un autre exemple. En d'autres termes, il y a beaucoup, beaucoup de travail en cours. Si vous avez des questions, s'il vous plaît me donner un coup de fil ou écrivez-moi à bgervais@copanational.org.

À PLEIN CIEL

Nous avons reçu quelques histoires qui transmettent la joie, ce sentiment d'être là-haut et qui nous anime À PLEIN CIEL. S'il vous plaît continuer à nous les envoyer à steve@copaflight.ca.

SOUHAITS DE LA SAISON

Pourquoi ne pas profiter de la belle saison d'hiver pour vous offrir un cadeau de « sécurité » pour moins de 100 \$? Allez faire un vol avec un instructeur ; c'est de l'argent bien dépensé.

En terminant, nous vous souhaitons de très joyeuses fêtes, entourés des personnes qui vous sont chères. Prenez du temps pour vous et les vôtres, reposez-vous et profitez de la saison. On se voit en 2020! 🐷





SEND US YOUR STORIES, LETTERS **AND PHOTOS**

COPA Flight is the outlet for COPA members to let others know what they're doing to advance, promote and preserve the Canadian freedom to fly, and we're here to share your stories.

Our Regions section publishes news about the myriad activities undertaken by COPA Flights across the country, our News section is the forum for stories of national interest that may be happening in your backyard, so if you have something to get off your chest, write us a letter to the editor. We always appreciate nice, high-resolution photos, whether to accompany your submissions or as part of our photo contest.

To help us deliver your message effectively and efficiently, we ask that contributors follow a few guidelines.

The new format lends itself to concise, punchy stories that get the message across clearly and economically. Please keep event reports and local news stories from 300 to 400 words. Send them in an MS Word document without any formatting or inserted graphics. News stories should be from 500 to 1,000 words, and make sure facts are checked and the statements made in the article are factual. We will edit out any libellous or erroneous material

Letters should be no more than 500 words and be civil and respectful. Photos must be sent in high resolution or we can't use them. A good rule of thumb is that if the image is 1Mb or larger it's good to go. Remember that this is your magazine and among its roles is to reflect the activities, goals and objectives of COPA. We're happy to help you make COPA even stronger through an open channel of communications. Send your submissions to steve@copaflight.ca by the first of the month for inclusion in the next magazine.

図 IS COPA NATIONAL SUPPORTING US?

This month, my COPA membership comes due. I was happy to support COPA for many reasons, but the one main reason is that COPA is our national voice since they represent Canadian GA pilots and stress safe flying.

I was very disappointed when COPA went radio silent on the control tower issues at Buttonville airport (CYKZ). There was no discussion on safe flying into that airport.

Movement into CYKZ today is complicated at best for most GA pilots who are not familiar with the very compressed airspace, low ceiling and more. Nav Canada terminated operations at CYKZ when there was a plan that CYKZ would close. However, it will be open for at least five more years. There are lots of politics going on with little regard for pilot safety.

Where is COPA on all of this?

Buttonville Flying Club is one of COPA's largest Flights, yet we seem to get zero support from COPA. I need a reason why I should renew my COPA membership. At the moment, I do not have one to renew.

> Michael Walker Thornhill, Ont.

us and local BFC folks. In fact, we drew some versions sitting with them around our board table in our office.

Your membership and that of all the BFC members is important, not only locally, but for all that is done nationally. I take good note of making sure we publicly let our members know of the work we do.

M CANNABIS AND PILOTING

Can anyone explain to me how it's legal for a 'sober' pilot to fly as little as 12 hours after gulping booze, yet a pilot who has had a puff of grass must wait 28 days?

For lots of capable COPA members who use cannabis medically or recreationally, this absurd situation shows a deep lack of understanding of the comparable effects of alcohol and cannabis.

It also means that these pilots are grounded, often permanently, a situation that hurts the entire struggling civil aviation community, from instructors to rental ops to fuel providers and more.

A little common sense and leadership from COPA might help to address this out-of-touch regulation.

> J. Ranscombe Gore Bay, Ont.

COPA CEO BERNARD GERVAIS RESPONDS:

Michael, I would invite you to read this month's President's Corner. Furthermore, COPA has lobbied Nav Canada, both publicly and not, to do the following:

- hold-off on closing the tower in 2018 (they did);
- look at the number of movements. in comparison to other airports around the country (they did);
- redo their homework on the assumption that the numbers would be stable and maybe grow if the airport were to stay open (they did).

We worked with Nav Canada to come up with safe VFR routes which they drew up after close consultation with

WINDSOR MILLS MEMORIES

I enjoyed the picture of the old airfield at Windsor Mills, Que., of the September COPA Flight. It is hardly recognizable except for the area on the upper left, which looks like it was once the tarmac. I think the runway was grass. My cousin took me there in the late 1940s. There was a hangar with a few civilian airplanes in it. I can still remember the beacon shining across the sky at night. I have been told that the mess hall was moved to Windsor Mills and became the curling club.

In the early 1950s the aircraft were sold off, some of which were Cornells. It was a 'buy and fly' arrangement at first, until someone went off the runway.

> James Knutson Waterville, Que.

I LUXURIOUS AIRPLANE TAX ■ LUXURIOUS AIRPLANE TAX

I have recently been made aware of the Liberal government's plan to put a 10 percent luxury tax on all private aircraft valued at or above \$100,000.

I trust COPA, as our national representatives, are fully aware of this and have addressed this short-sighted, ill-conceived idea with our federal government.

They should be advised of the crises in the making due to the increasing shortage of commercial pilots, which is a direct result of fewer young private pilots learning to fly and moving on into a commercial career, which in turn is a direct result of the ever increasing costs of learning to fly, which in turn means there are less flight instructors to teach people to fly. Less people learning to fly means fewer facilities to train people; it's simple supply and demand. Taxing the aircraft that people are learning to fly with is counterproductive to the whole situation.

If our government was thinking about the future of general and commercial aviation in Canada, which of course they are not, they would be implementing ideas that reduce the cost of learning to fly, not just looking at a tool to generate revenue with no thought at all to the consequences.

I trust you will make a very strong and forceful representation to Prime Minister Trudeau on our behalf, and make sure this tax never comes to fruition.

> Chris Elgar Burlington, Ont.

EFLIGHT

Members are reminded that they must sign up to receive our weekly eFlight newsletters — it is not sent to you automatically. eFlight contains many stories and breaking news of interest to our members, stories that are usually not repeated in the magazine.

To sign up, enter your name and email address in the appropriate boxes, found on the lower left side of our website (copanational.org).

Waterloo Wellington Flight Centre

The Skills You Need — The School You Want



Strong education and industry partnerships, give our graduates a competitive edge and the skills needed to fly in jobs across Canada.

Contact us today! 519-648-2213 | 1-877-FLY-WWFC | wwfc.ca

Partnered with:



CONESTOGA



Waterloo Wellington Flight Centre professional programs are appro vocational programs under the Private Career Colleges Act. 2005 (PC# 105919).



HOPE AIR provides Canadians in financial need with free travel to medical care far from home. Your donation allows patients to focus on what's important: their health.

To learn more and to donate, visit hopeair.ca

NEW OPERATIONS DIRECTOR

BY BERNARD GERVAIS



I am pleased to announce that a few weeks ago Neil Bennett joined us at COPA, working in the office with JC Audet. Neil will gradually be doing more and more until he can entirely assume the role.

Functionally bilingual, Neil brings to us extensive aerospace and air navigation expertise, as well as knowledge and experience in management, customer service and all the necessary skills to maintain the high standards that our members expect. You can check out Neil's background and experience on LinkedIn. He can be reached at 613 236-4901- ext. 108.

NOUVEAU DIRECTEUR DES **OPERATIONS**

Je suis heureux d'annoncer qu'il y a quelques semaines, Neil Bennett s'est joint à nous à la COPA, travaillant au bureau avec Jean-Claude Audet. Neil va progressivement prendre de plus en plus de responsabilités, jusqu'à ce qu'il puisse assumer entièrement le rôle.

Fonctionnellement bilingue, nous apporte une vaste expertise en aéronautique et en navigation aérienne, ainsi que des connaissances en gestion, service à la clientèle et toutes les compétences nécessaires pour maintenir les normes élevées auxquelles nos membres s'attendent.

Vous pouvez consulter ses antécédents sur LinkedIn. Il peut être joint au 613 236-4901 au poste 108.



A CONVERSATION WITH

MIKEY MCBRYAN

COPA FLIGHT INTERVIEWS BUFFALO AIRWAYS MANAGER

BY CLARK MORAWETZ, COPA DIRECTOR FOR SOUTHERN ONTARIO

It's very likely that you have heard of Mikey McBryan, whose official job is running charter operations at Yellow-knife, N.W.T.'s Buffalo Airways. You have likely heard of him from the reality TV show Ice Pilots: NWT or, more recently, his YouTube series Plane Savers.

In season 1 of Plane Savers, McBryan, along with his team of professionals and aviation enthusiasts, took a derelict DC-3 from the uncut grass inside the fence at Montreal's St. Hubert airport (CYHU) and, in less than six months, restored it to flying condition. It was an incredible feat that was capped off by flying the DC-3 (registered as C-FDTD) to Oshkosh, Wisconsin for Airventure 2019.

In season 2 of Plane Savers, McBryan and his team are back, but this time they are rebuilding a replica of a Fokker Dr.1 at Buffalo Airways Yellowknife headquarters. COPA Flight had the opportunity to catch up with McBryan to talk about the effect of Plane Savers and what the future holds for the very popular web-based series.

CF: What inspired you to start Plane Savers?

MM: The inspiration to start Plane Savers came from the necessity to raise awareness about saving the forgotten D-Day DC-3 C-FDTD. From my experiences with previous TV shows, I knew the best way to get people involved is to entertain them. Little did I know what impact it ultimately had.

CF: What was your biggest surprise after season 1 of Plane Savers?

MM: After season 1, the biggest surprise was going to Airventure 2019 in Oshkosh and the number of people that I

ran into that loved Plane Savers. I made the pledge to fly the DC-3 to Oshkosh for Airventure 2019 if we got it done in time. Our co-pilot for the trip was COPA member Larry Buckmaster out of Kelowna, B.C. I was at Oshkosh last year and the difference was amazing.

CF: Is DTD the first aircraft that you have ever owned personally? If so, what have you learned about aircraft ownership since acquiring and operating DTD?

MM: DTD was the first aircraft that I owned personally. I have learned a lot about Transport Canada paperwork. But to tell you the truth, Transport Canada has been amazing to deal with and I am forever grateful. Think of this, we had no data tags, no paperwork, no logbooks, no Certificate of Airworthiness, no Certificate of Registration, no maintenance program and only 56 days to get it all done (let alone almost every part missing on the aircraft). The paperwork alone should have been almost impossible to do in a year. But a handful of Transport personnel really made the difference. They are the unsung heroes of the project. Oh, and when it's your own aircraft you really focus on fuel price.

CF: How did you get to know Steve Thorne, better known as Flight Chops?

MM: I met Flight Chops at the COPA Convention in Kelowna, BC, a few years back. He was the first person I have ever met that made a living from You-Tube. Once I got back home to Yellow-knife, I started watching his content and that helped inspire me to make my own YouTube Channel and intern Plane Savers. So, you can say it's COPA's fault there is a Plane Savers.



CF: Have you placed any friendly bets with the Canadian Historical Aircraft Association (CH2A) and Flight Chops regarding their Tiger Moth project?

MM: It was Flight Chop's idea to go head to head with our Season 2 Fokker Dr.1 and CH2A's Tiger Moth project. Deadlines and goals make projects run a lot smoother. The reason Canada is full of half-built airplanes is that there is no clear end goal. Making a friendly bet helps move things along. As for a wager, I think bragging rights is the best commodity.

CF: Will we see the two projects together once they are both restored/rebuilt?

MM: We are working towards getting our Fokker Dr.1 to Airventure 2020 next year so the CH2A crew better get the Tiger Moth done in time to come join us.

CF: What is the best way for our members to follow your progress with the Fokker Dr.1?

MM: As you can guess, the best way to follow along as we save the Fokker Dr.1 is to watch our YouTube Channel *www. youtube.com/mikeymcbryan.* I will see you over there.

INCIDENTS + ACCIDENTS

ATLANTIC REGION

An uncorrelated radar target appeared indicating an altitude of FL243 with a VFR transponder code of 1200. The target was observed for approximately 30 minutes and after contacting Halifax Flight Information Centre (FIC), it was determined it was a Cessna 172 operating VFR in the Stephenville, NL (CYJT) area.

At approximately 1230Z a 9289-8998 Québec Inc. Aeronca 11ACX on floats (C-FNFC) experienced a mechanical issue and conducted a forced landing in a field approximately 12NM southeast of Edmunston, NB (CYES). The sole pilot exited the aircraft unharmed and shut off the emergency locator transmitter (ELT). The aircraft suffered minor damage to its floats and will be assessed for structural damage. The aircraft was secured at the property pending inspection by the owner's insurance. Emergency services did not attend.

QUEBEC REGION

Information received from the Joint Rescue Coordination Centre (JRCC) Trenton. At takeoff from a river, a J'en perds le Nord S.E.C. Cessna R172K (C-GBDQ) on a flight to Alma, QC (CYTF) got stuck and could not take off. The extent of the damage is unknown. No injuries or fatalities. The Transportation Safety Board of Canada (TSB) and the Aviation Operations Centre (AOC) were notified.

After it had received and read back clearance for standard instrument departure (SID) CYHU6, a Government of Canada Department of National Defence Bell 412 (WCAT038) from Montréal/St-Hubert, QC (CYHU) to Ottawa/ Gatineau, QC (CYND) was seen turning left on a heading of 220, even though the SID calls for a climb on the runway centreline. No impact on operations.

ONTARIO REGION

A privately registered, amateur-built, Baldwin JAOA on a flight from Kitchener/Waterloo, ON (CYKF) was instructed to hold short of Runway 08. The aircraft read back that they would hold short, but crossed the hold-short line. An aircraft inbound with a landing clearance for Runway 08 had to pull up and go around.

AuroraAerial Inc, authorized to operate an RPAS demo flight in downtown Toronto reported a lost comm link during hover test and RPAS continued and landed as expected and subsequently recovered.

PRAIRIE AND NORTHERN REGION

Received a call regarding an aircraft accident, a privately registered Piper PA-22-135 had flipper over just south of Innisfail, AB (CEM4). Caller advised there was one person on board, no injuries and no assistance needed.

A Montair Aviation Cessna 172S (C-GAGV) on a flight from Red Deer Regional, AB (CYQF) to Red Deer Regional, AB (CYQF) and a Montair Aviation Cessna 172R (C-GGPQ) on a flight from Red Deer Regional, AB (CYQF) to Red Deer Regional, AB (CYQF) both entered control zone at the same time. Neither aircraft complied with air traffic control (ATC) instructions for circuit entry pattern. Neither were able to locate any aircraft traffic. Communication with both aircraft was poor due to inability of pilots to understand basic ATC instructions. Operations on the airport were delayed.

PACIFIC REGION

Accident report received from Kamloops, BC (CYKA) flight information centre (FIC) on a Black Sheep Aviation & Cattle Co. de Havilland DHC-2 MK. I (C-GNPO) on a flight from Watson lake, YT (Water) (CEJ9) to Watson Lake, YT (Water) (CEJ9). Report of controlled crash due to engine failure, no assistance required. Helicopter was on its way to retrieve persons on board (POB). No emergency locator transmitter (ELT) activation.

A Hart's Aviation BC Aeroprakt-22LS ultra-light (C-ILWA) on a flight from Langley Regional, BC (CYNJ) to Langley Regional, BC (CYNJ) departed for a first solo flight. The aircraft was observed flying erratically. After several unsuccessful approaches, the tower upgraded the situation to an emergency and called in emergency services on standby. The aircraft crashed on Runway 01 at 2030Z. Significant damage to the aircraft was observed, no injuries reported. Multiple aircraft were diverted or delayed, including a Langley Flying School Piper PA-34-200 (C-GURW) on a flight from Langley Regional, BC (CYNJ) to Langley Regional, BC (CYNJ) who had to go to Abbotsford, BC (CYXX).

RÉGION DE L'ATLANTIQUE

Une cible radar sans corrélation est apparue au FL243 en affichant un code transpondeur VFR de 1200. La cible a été observée pendant une trentaine de minutes, et après avoir contacté le centre d'information de vol (FIC) d'Halifax, on a conclu qu'il s'agissait d'un Cessna 172 volant en VFR dans la région de Stephenville (CYJT), NL.

Vers 1230Z, un Aeronca 11ACX sur flotteurs (C-FNFC), exploité par 9289-8998 Québec inc., a eu des problèmes mécaniques et effectué un atterrissage forcé dans un champ à environ 12 NM au sudest d'Edmunston (CYES), NB. Le pilote, seul à bord, s'est extirpé indemne de l'aéronef et a éteint la radiobalise de repérage d'urgence (ELT). Les flotteurs de l'aéronef ont été légèrement endommagés et seront inspectés pour voir s'il y a des dommages structuraux. L'aéronef a été amarré sur les lieux en attendant son

inspection par la compagnie d'assurance du propriétaire. Les services d'urgence ne sont pas intervenus.

RÉGION DU QUÉBEC

Information reçue du centre conjoint de coordination de sauvetage (JRCC) de Trenton. Au décollage d'une rivière, un Cessna R172K (C-GBDQ) exploité par J'en perds le Nord S.E.C. effectuant un vol à destination d'Alma (CYTF), QC, s'est abimé et n'a pas pu décoller. L'étendue des dommages est inconnue. Aucun blessé ni décès. Bureau de la sécurité des transports du Canada (BST) et Centre des opérations aériennes (COA) avisés.

RÉGION DE L'ONTARIO

Un Baldwin JAOA, d'immatriculation privée et de construction amateur, de Kitchener/Waterloo (CYKF), ON, a recu l'instruction de se tenir à l'écart de la piste 08. L'aéronef a relu l'instruction de se tenir à l'écart, mais a traversé la ligne d'attente à l'écart. Un aéronef en rapprochement, qui avait reçu l'autorisation d'atterrir piste 08, a dû remettre les gaz.

Aurora Aerial Inc. qui avait été autorisé à faire un vol de démonstration RPAS au centre-ville de Toronto, a signalé une perte de communications par liaison de données durant le vol d'essai stationnaire et indiqué que le RPAS avait continué de voler et atterri comme prévu avant d'être récupéré.

RÉGION DES PRAIRIES ET DU NORD

Appel reçu concernant un accident d'aéronef, un Piper PA-22-135, d'immatriculation privée, qui s'est retourné juste au sud d'Innisfail (CEM4), AB. L'appelant a précisé qu'il y avait une personne à bord, aucun blessé, et qu'aucune assistance n'était demandée.

Un Cessna 172S (C-GAGV), exploité par Montair Aviation, de Red Deer Regional (CYQF), AB, à Red Deer Regional (CYQF), AB, et un Cessna 172R (C-GGPQ), exploité par Montair Aviation, de Red Deer Regional (CYQF), AB, à Red Deer Regional (CYQF), AB, sont tous les deux entrés dans la zone de contrôle en même temps. Aucun des aéronefs n'a suivi les instructions du contrôle de la circulation aérienne (ATC) pour l'entrée dans le circuit. Aucun des deux n'a pu localiser d'aéronef. La communication avec les deux aéronefs était mauvaise à cause de l'incapacité des pilotes de comprendre les instructions de base de l'ATC. Opérations de l'aéroport retardées.

RÉGION DE PACIFIQUE

Rapport d'accident reçu du centre d'information de vol (FIC) de Kamloops (CYKA), BC, concernant un de Havilland DHC-2 MK. I (C-GNPO), exploité par Black Sheep Aviation & Cattle Co., de Watson Lake (Water) (CEJ9), YT. à Watson Lake (Water) (CEJ9), YT. Rapport indiquant un écrasement contrôlé en raison d'une panne moteur. Aucune assistance demandée. L'hélicoptère était en route pour récupérer des personnes à bord (POB). La radiobalise de repérage d'urgence (ELT) ne s'est pas déclenchée.

Un Aeroprakt-22LS ultra léger (C-ILWA) exploité par Hart's Aviation BC en provenance et à destination de l'aéroport régional de Langley, BC (CYNJ) a décollé pour un premier vol en solo. L'aéronef a été observé en train de voler de façon erratique. Après quelques approches infructueuses, la tour a décrété que la situation était désormais urgente et a demandé que les services d'urgence soient mis en état d'alerte. L'aéronef s'est écrasé sur la piste 01 à 2030Z. L'aéronef a subi des dommages importants, mais aucun blessé n'a été signalé. De nombreux aéronefs ont été déroutés ou retardés, dont un Piper PA-34-200 (C GURW) exploité par la Langley Flying School en provenance et à destination de l'aéroport régional de Langley, BC (CYNJ) qui devait se rendre à l'aéroport d'Abbotsford, BC (CYXX).





ENFORCEMENTS

QUEBEC REGION

The pilot-in-command of an aircraft operating at or in the vicinity of an airport failed to comply with the operating restrictions specified by the Minister in the Canada Flight Supplement. (CAR 602.96(3), \$750)

The pilot-in-command of an aircraft failed to comply with all of the air traffic control clearances received and accepted. (CAR 602.31(1), \$750)

A person acted as a flight crew member when that person was not the holder of a valid permit, licence or rating. (CAR 401.03(1), \$1.000)

ONTARIO REGION

A person failed to operate an unmanned air vehicle in flight in accordance with a special flight certificate or an air operator certificate. (CAR 602.41, \$1,000)

A person operated a Remotely Piloted Aircraft System (RPAS) contrary to many rules of Part IX of the Canadian Aviation Regulations. (Various RPAS Rules, \$2,750)

The pilot-in-command of an aircraft operating at or in the vicinity of an aero-

drome failed to conform or avoid the traffic pattern formed by other aircraft in operation. (CAR 602.96(3), \$750)

A person operated an aircraft at a distance less than 500 feet from any person, vessel, vehicle or structure. (CAR 602.14(2), \$750)

A person operated an aircraft in Canada that was neither registered in Canada, in a contracting state or in a foreign state that had an agreement in force with Canada. (CAR 202.13(2), \$1000)

RÉGION DE QUÉBEC

Le commandant de bord qui utilise un aéronef à un aéroport a omis de se conformer aux restrictions d'exploitation précisées par le ministre dans le Supplément de vol-Canada. (RAC 602.96(3), 750 \$)

Le commandant de bord d'un aéronef a omis de se conformer à toutes les autorisations du contrôle de la circulation aérienne qu'il a reçu et qu'il a accepté. (RAC 602.31(1), 750 \$)

Une personne a agi en qualité de membre d'équipage de conduite alors que la personne n'était pas titulaire du permis, licence ou de la qualification pertinents et valide. (RAC 401.03(1), 1 000 \$)

RÉGION D'ONTARIO

Une personne a omis d'utiliser un véhicule aérien non habité conformément à un certificat d'opérations spécialisées ou à un certificat d'exploitation aérienne. (RAC 602.41, 1 000 \$)

Une personne a utilisé un système d'aéronef télépiloté (RPAS) contrairement à plusieurs règlements de la Partie IX. (Règlements RPAS Variés, 2 750 \$)

Le commandant de bord qui utilise un aéronef à un aéroport a omis d'adopter le circuit de circulation suivi par les autres aéronefs ou de s'en tenir à l'écart. (RAC 602.01, Suspension 60 jours)

Une personne a utilisé un aéronef à une distance inférieure à 500 pieds de toute personne, tout navire, tout véhicule ou toute structure. (RAC 602.14(2), 750 \$)

Une personne a utilisé un aéronef au Canada alors qu'il n'était pas immatriculé au Canada, dans un État contractant ou dans un État étranger ayant conclu un accord avec le Canada. (RAC 202.13(2), 1000 \$)



COPA FLIGHT 201-GORE BAY IS **ALL FOR FLIGHT**

NEW FLYING CLUB HAS FIRST SCHOLARSHIP STUDENT

BY MARK WII SON

The Gore Bay Flying Club was formed in March 2017, two months after local corporate pilot and instructor Wade Cook started a free ground school for all comers. Cook's dream was to go from ground school to a flying club to buying a club plane and training club pilots. It all happened.

When my girlfriend Pam saw Cook's ad in the local paper, she said, "You should try this. Your dad, mom and oldest brother were pilots, you have another brother and his son who are pilots. You can do it." So, I did, at 61 years old.

Gore Bay is a town of 900 on Manitoulin Island, Ontario ('largest freshwater island in the world' we say, at 160 by 64 km). The ground school attracted 50 people the first night, from all over the Island. Twenty students eventually made it to completion.

As ground school ground on, we formed the Gore Bay Flying Club, elected our club president (Tim St. Amand), started looking at planes to buy and, with the help of Lloyd Richardson from COPA, formed COPA Flight 201. Richardson also connected us with the perfect trainer plane — we bought a lovely 1968 Piper Cherokee 140.

Then another idea hatched: after a conversation with Cook, my other two brothers and I decided to donate a share in the club plane in memory of our family's departed pilots, to be used with a youth scholarship to train young people on Manitoulin to be pilots. The moral of this story is, never hatch an idea: they made me chair of a new scholarship committee.

I started flying lessons, pushing the old brain to learn how to fly our Cherokee 140, and worked with our scholarship committee to put things in place and attract some local attention. Well, you'd think we weren't offering a gift worth well more than \$10,000. With generous donations from the Manitoulin community, we cover the full cost of one young person per year completing all their training for a PPL or RPP. Maybe people thought it was too good to be true - no applicants. Finally, in winter 2019, we got some uptake and a few youngsters came to an information meeting we held in the Island secondary school. One real gogetter was Avery Sheppard, a Grade 11 student from Mindemoya (population 800), another small town on Manitoulin. (There are no big towns on Manitoulin.) We selected Avery as our first scholarship recipient in June 2019.

After completing online ground school, Avery began flying lessons with Cook and became the club's youngest student pilot. Meanwhile, the club's oldest student pilot - me - finally got his RPP (just nicely before I get my OAS). What can I say — it was just really fun to hear Avery on my aircraft radio scanner when she started making her own calls. She has a charming version of the Manitoulin accent those of us born and raised here have in our bones. And just to hear a female voice in the pilots' calls is a refreshing change from the male majority.

Then came the big day. On August 27, 2019, the Gore Bay Flying Club's first scholarship student flew solo. I was there to record the event, along with Cook and a local reporter. Avery's mom, dad and cousins (club members who first brought her to our attention) were excited and, yes,



just a little nervous. We basically tried to hide behind trees and gas pumps so she wouldn't be distracted by seeing us in her four dual circuits and the solo. Okay, so she's 1,000 feet up in the circuit and totally focussed on the runway on takeoffs and landings; a 300foot zeppelin wouldn't distract her. Her calls sounded cool as a cucumber on the speakers of the Gore Bay Unicom radio. Gore Bay - Manitoulin Airport (CYZE) is an amazing certified airport for a small community - two runways, with 11/29 being 5,500 feet long. We also have Manitoulin East aerodrome (CYEM), with one runway.

By the time Avery was in her solo circuit and coming around to land, we pretty well threw all that caution to the 'crosswind' that she was handling and just about swarmed the runway. But she brought it in beautifully, greasing it on.

We were all very proud, and the Gore Bay Flying Club's Youth Pilot Training Scholarship got off to a great start, thanks to Avery. As of October, Avery continues training and is well on her way to the flight test. We're definitely all for flight!

WEATHER BRIEFINGS

HEAR IT FROM THE SPECIALISTS



aving just read the article in the COPA eFlight newsletter regarding remote weather station outages it brought to mind the many misconceptions that many pilots have about weather information and weather briefings. The most common error is to think that all one needs is the actual weather and terminal forecasts for point of departure and destination, even for a short or local flight. In some instances it might work, but that only serves to encourage faulty thinking and risk-taking. Another factor to keep in mind is that weather observing and forecasting is highly subjective and not an exact science. No two observers will report the same conditions in the same way, nor will two forecasters interpret and predict the weather in the same way. Flyer beware. So, the more information on hand the safer you are likely to be.

In this instance a go/no go decision seems to be heavily dependent upon an unmanned, remote weather station. The problem with this is that unobserved weather conditions can result in the production of misleading weather information. For example, when Watson Lake had a newly installed automated weather station, I received a call from a Central Mountain Air pilot who was approaching CYQH and requested weather. The auto station was reporting IFR conditions. The pilot had the airport in sight and was reporting CAVU conditions. It turned out that a small fog patch had settled around the sensors and consequently we were receiving erroneous reports.

In another instance a pilot commenced a flight from Whitehorse to Dawson City. I gave him a thorough briefing and noted that there appeared to be a small low-pressure system in the vicinity of Dawson City. Experience told me that he might encounter icing and other adverse weather conditions which had not been included in the forecast products. I brought this to his attention and, with this knowledge in mind, he elected to go anyway. As he was nearing Dawson City he encountered icing and was forced to return to

Whitehorse. Fortunately, he was forewarned and forearmed and knew the correct decision to make.

In the space of a two-week period there were three fatal accidents where I was directly or indirectly involved:

1) A local pilot had received a briefing from my co-worker and departed Whitehorse under clear blue skies. Destination Dawson City. When he was en route over Lake Labarge he contacted me on 126.7 simply to check in and position report. Always a good practice. Although I had not been briefing that day it was still necessary to maintain the weather picture while working en route traffic, so I advised the pilot of snow squalls that I could see at the top of the lake. I strongly suggested that he reconsider his intended VFR flight but he opted to continue. His next broadcast was in the vicinity of Fox Lake where he simply reported "I am in the snow." Later that day his wrecked aircraft was discovered on the frozen surface of Fox Lake. Two fatalities.

2) A British Columbia pilot called to get the actual and terminal forecast weather for Snettisham, Alaska, a route which he flew almost daily. I asked if he would like a full weather briefing and he declined the offer. Knowing that there was a valid weather warning for severe low-level wind shear along his route of flight, I volunteered that information regardless and suggested that he consider postponing his flight. He made it to Snettisham but crashed on the return fight the same day. Two fatalities.

3) An American pilot returning to Alaska from the lower 48 was in the vicinity of Teslin. Again I received a request for the actual and terminal forecast for Whitehorse. I looked out $\frac{1}{4}$

the window and saw clear blue skies and sunshine which is all that was being reported for the terminal area. However, just beyond the forecast area were snow squalls in all directions. Back in the day, and probably still today, the policy was to provide information to allow the pilot-in-command to make the go/no go decision, but having experienced some recent fatalities where my suggestions had apparently been ignored, I was feeling a tremendous amount of pressure to avoid a repeat scenario. I advised the VFR pilot that to continue might be dangerous and suggested that he return to Watson Lake and try again the next day. He opted to continue. Shortly after I received a phone call from the Teslin CARS (Community Aerodrome Radio Station) operator reporting that there was an aircraft flying at roof-top level over the community in white-out conditions. The next morning the aircraft was found

wrecked on the frozen surface of Teslin Lake. One fatality.

This experience, and others like it, are incredibly draining on a weather briefer/Flight Service Specialist when one feels that one's best advice is being ignored when the risk of danger is incredibly high. I am haunted by these incidents, even today in retirement. I still wonder, "what could I have done differently to have prevented the fatal results?" The answer really is nothing. I did my job to the best of my ability and the pilots made their decisions. In this instance, an inbound Transport Canada pilot had overheard the complete conversation and was kind enough to seek me out to tell me that I had done everything right. But it still bothers me, even in the retelling here.

So, to get back to the remote weather station. It is only one source of information in a basket of goodies. Your friendly Flight Information Centre has access to many tools from which to create a complete weather picture. Upper Air Charts, forecast maps, satellite imagery etc. can be used to create the "big picture" and to give one a fairly good feel for how the weather might be in a general area, including wind and visibility. An educated decision can still be made based on the information but, having said that, and particularly in mountainous regions, local conditions can vary due to a variety of conditions, including terrain and proximity to water.

The bottom line is really this. "Are you willing to gamble foregoing a twenty minute (or less) complete and proper weather briefing against the rest of your life?" 🅯

Ken Ettie is a pilot and retired Flight Service Specialist, having started his profession in Sault Ste. Marie, Ont. before spending the rest of his career in Inuvik, N.W.T, Whitehorse and Norman Wells, Yukon, and Castlegar and Cranbrook, B.C. - Ed.



Liability Insurance for COPA Members!

COPA now offers a comprehensive program specifically designed to protect owners and operators of commercial drones.

Benefits of the program include:

- Get quotes and policies in just minutes with a fully automated online process.
- Protection at competitive rates.
- Knowledge of local laws and regulations to ensure the right coverage.

To learn more, contact The Magnes Group Inc. at 1-855-VIP-COPA or visit us at uavinsurance.ca.

Assurance Responsabilité pour les membres de la COPA!

La COPA offre maintenant un programme d'assurance tous risques élaboré spécifiquement pour protéger les propriétaires et les opérateurs de drones commerciaux.

Les avantages du programme incluent entre autres:

- Des soumissions et polices en seulement quelques minutes grâce à notre système en ligne entièrement automatisé.
- Protection à des tarifs compétitifs.
- Une connaissance des lois et règlements locaux pour garantir une bonne couverture d'assurance.

Pour de plus amples renseignements, contactez le Groupe Magnes au numéro de téléphone 1-855-VIP-COPA ou visitez le site internet uavinsurance.ca.

uses prouties à dissolatine commenciale en la dissolation de la condiction de ou Canada. La présente protection pourrait ne pas être disponible dans toutes les provinces et lous les territoires et est assujetite aux termes et aux conditions des polices en vigueur. Les produits et les services de nature autre que l'assurance pourraient être fournis par des tierces





Coverage proudly administered by The Magnes Group Inc. and underwritten by AIG Insurance Company of Canada Couverture administrée fiérement par The Magnes Grou Inc. et souscrite par AIG Insurance Company of Canada



PHOTO

THE HIGH SIERRA FLY-IN

A CELEBRATION OF BACKCOUNTRY FLYING



he sun was setting behind the High Sierra Mountains and the light grew dim as we turned off of Nevada's I-80 and began our journey down a narrow dirt road in a rented 34foot Winnebago. We drove at only of twenty-five kilometres an hour through the pitch-black desert before we made the turnoff into the most challenging part of the drive. The road out to Dead Cow Lakebed is known to be tricky. The last five kilometres, before you make your way on to the playa, are ridden with potholes that could swallow a sedan. We were lucky it hadn't rained, so the conditions were dry, but that didn't help us when we got lost. Thankfully, we had one bar of cellphone reception and were able to call for help. A quad arrived and escorted us to the camping area where the next challenge awaited us - avoiding a collision with an airplane

in the dark. Since that moment, one of my greatest fears in life has become hitting an airplane with a Winnebago, second only to hitting an airplane with another airplane.

When we opened our curtains the next morning, we were all stunned at the sight of the white cracked lakebed floor, the dozens of Kitfoxes and other planes and the rolling hillsides of the High Sierras. Planes buzzed low along the row of camper trailers, waking everyone at 07:00 to the sound of Carbon Cubs. At that moment we knew that the High Sierra Fly-in would not disappoint. Dozens of aircraft had arrived before Thursday morning and began their run-ups early to venture off into the desert to explore. The greatest appeal of this particular fly-in is the idea that, with the right imagination and a capable aircraft, the possibilities are limitless. With so much room to

Clockwise from above: The flat desert makes for a great landing surface; Jeremy Rahn arriving from Canada in his Kitfox; Josh and Natalie Esser taxiing in their Kitfox; Fabulous sunsets reward visitors.

play through the rolling landscape, the dried-out lake beds of the wild desert. it's no wonder why pilots travel from across North America to experience this slice of heaven. The landscape in Nevada is truly beautiful.

Another reason pilots travel to the High Sierra Fly-in is to watch, and take part in, the STOL drag races. STOL Drag requires that two aircraft fly a threequarter mile straightway down and back in a drag racing format side by side. The first aircraft to come to a complete stop, on heading, moves on to the next round. Originally, the STOL Drag finals were planned for Saturday but with the winds forecasted to pick up, the qualifiers and







finals were both run on Friday. The number of Canadian aircraft on the field and pilots taking part in the races was impressive. Three female pilots took part in this year's High Sierra STOL drag races, including two Canadians: Katie Waito in her Pitts S1C and Natalie Esser in her Kitfox. The crowd roared as the Pitts screamed across the flight line far ahead of its competitors. The Pitts isn't an aircraft you would normally see in a STOL drag race, but Katie has a great sense of humour and likes to have more fun than the average human being.

Natalie Esser of Edmonton was the first woman ever to make it into the finals. Earlier in the day she ran into some mechanical problems with her aircraft but was able to have everything ready just in time for her qualifying run. In the finals she was matched up against Steve Henry in his Just SuperSTOL Highlander and unfortunately did not move on to the next round. Since making it into the finals, Esser has been invited to the Reno Air races to compete in STOL Drag and will be the only female competitor on the 2020 roster. Another Canadian who performed incredibly well at the races was Jason Busat. The 2019 Oshkosh STOL Champ flew his Edge Performance 914STi-powered Rans against the likes of Trent Palmer and Steve Henry. Be sure to keep an eye out for these two Canadians at the Reno Air Races next year.

This year's event played host to five hundred aircraft and two thousand people, the largest turnout yet. Kevin Quinn, the event organizer, limited the amount of aircraft permitted to fly in, always keeping safety in mind. There was so much excitement on the flight line watching the arriving aircraft; a Pilatus PC24 business jet landing on a dried-out lakebed in the middle of

the desert was certainly a sight to see. Some of the other aircraft on the field included two Antonovs, a number of Stearmans and a Turbo Beaver. The 2019 High Sierra Fly-in brought Pilots from different walks of life and different parts of the continent to celebrate backcountry aviation.

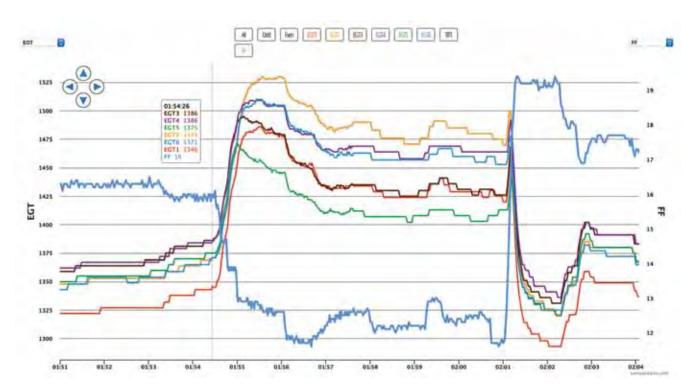
At the end of each day everyone would gather around the bonfire and share stories under the starry night skies - that may have been my favourite part. The people of the High Sierra Fly-in made it the most memorable aviation event I have ever attended because, after all, without them their aircraft would just be empty shells. Looking forward to more adventures in the High Sierras in the coming years.

@pilotannie

#allforflight

GLASS-BASED POWERPLANT MANAGEMENT

DIGITALIZING YOUR ENGINE'S INSTRUMENTS



raphic Engine Monitors (GEMs) have become the Swiss Army knife of aircraft flight instruments. Yesterday's cockpit panels used many instruments and gauges to show RPM, manifold pressure, fuel pressure, cylinder head temperature (CHT) and exhaust gas temperature (EGT) and more. The Commander that I fly has six analog engine gauges.

With analog gauges, it was incumbent upon the pilot to recognize what was 'normal'. Leaning was accomplished by watching for a rise in RPM followed by a decline. With the introduction of the GEM in 1981, pilots were able to change the way they leaned, allowing fuel consumption to drop. With today's fuel prices near \$2 per litre or more, proper leaning is even more important.

A GEM is a single instrument which monitors, records and displays many the operating parameters of an engine, uncluttering the panel of older analog instruments. Add in flight information delivered by air data instruments and owners, pilots and mechanics have better insights into the daily health of the power plant and airframe.

Electronic Instruments (EI) have been manufacturing a variety of TSO'd and STC'd engine instruments and GEMs for the past 40 years. Their products are designed to match the pocketbook of the aircraft owner. El's series of GEMs are in fact purpose-built computers. Complete with a processor, RAM, internal storage, USB port and an LED screen, the MVP-50 and CGR-30 GEMs have purpose-built software which records data from sensors such as EGT, CHT, OAT, oil pressure, oil temperature, fuel pressure, GPH, RPM, manifold pressure, just to name a few. In addition to engine parameters, the MVP-50 has a variety of other capabilities, including checklists and fuel management.

The contents of the GEM can be copied onto a computer for review and A typical image generated by Savvy Analysis after reception of customer's engine monitor data.

analysis. With one spreadsheet file (.csv) for each flight, the number of files and data can be excessive. EGTrends has a software program called EZView which requires little or no IT experience. It allows you to analyze display stored engine data. Simply plug a USB memory stick into the GEM (the MVP50 has a USB port on the front while the CGR30 has a 'pigtail' on the back) and after a few simple button-pushes on the instrument, the data will be copied onto the USB stick. The data from the USB stick can then be copied onto your computer. The file size of an average flight is quite small, but there is lots of data to be reviewed. Most GEM manufacturers have focused on the instrument and probes, not the analysis of the data.

In comes the intersection of IT and general aviation. The data contained



in the GEM is exceptionally useful, but typically cannot be accessed by the average pilot or mechanics. From an aircraft perspective, adding analysis, trending and reporting is critical to long-term engine health.

Engine Big Data (EBD) analysis changes the way we operate our aircraft. Knowing the trends can help change the way we lean the engine and triage problems. In comes the 'Cloud'. Savvy Analysis, a subsidiary of Savvy Aviator, provides the tools to gather, analyze and provide recommendations on the operation and maintenance of an engine. For the past seven years, Savvy Analysis, led by Mike Busch, has been storing, analyzing and trending data from a variety of GEMs and aircraft. Savvy has been able to develop a cloud-based storage, presentation and analysis tool designed to allow aircraft owners and mechanics to quickly and easily understand the data from their aircraft.

Savvy's Failing Exhaust Valve Analysis tool (FEVA) can help predict a failing valve before it fails in flight. Many times, a sticky valve will be evident when the engine is started. With no EGT and CHT, the valve in question will return to normal operation after a few minutes of heating. Many mechanics refer to this as morning sickness and may be ignored by pilots new to aircraft ownership. The consequences of a sticky valve in flight at 75 percent power is not for the faint of heart. For example, with an exhaust value stuck open, raw fuel will enter the exhaust,

power will be diminished and vibration from an unbalanced engine will resonate through the airframe. Dealing with a valve problem on the ground is less costly than in the air.

Offered as a free service, the aircraft owner is able to review the data themselves. Additionally, on a subscription basis, analysts at Savvy Analysis can review and report on the data from specific flights. Interpreting the flight and engine data provides recommendations both in terms of engine performance, leaning procedures and preventative maintenance. Savvy's PRO subscription provides detailed reporting including a summary and recommendations of the analyst's findings. Savvy's PRO annual subscription is U\$129 (single engine) and U\$199 (twins). Their PRO PACKs are designed for maintenance shops which are looking after many aircraft and running reports infrequently. The PRO PACKs are available in five, 10 and 20 analysis reports.

Analytics and data are able to help mechanics pinpoint problems which need adjustment or engine parts which need replacement, saving time and money during diagnosis. For example, fuel flows that need adjustment or fuel nozzles that need cleaning, problems with magneto timing, failing EGT/CHT probes or harnesses and electrical system problems. A lot of time and money can be saved through targeting the problem, rather than a trial and error approach, eliminating replacing hardware unnecessarily.



- 406 sale + service
- Repair station for all headsets
- Factory Authorized Dealer for Technisonic Industries LTD
- 2-4 days turn around time on **ELT** certification
- Artex. Kannad. Pointer. Ameri-King, ACK, David Clark headsets
- French + English service

SEND YOUR ELT 121.5 FOR CERTIFICATION WITH DISCOUNT AVIONICS AND HAVE THE CHANCE TO WIN AN UPGRADE TO 406! **DRAW WILL BE JANUARY 2019**

LET'S START THE YEAR ON A GOOD FREQUENCY!

•••••

364 Hwy 11 West, Cochrane, Ontario, Canada P0L1C0

Office: 877-878-8363 Cell: 705-272-9179 Facebook @ DiscountAvionics

www.discountavionics.com



FORMATION FLYING DISSECTED

Text by Michel Pomerleau, Photos by Hughes Drouin

COPA Flight 46 — St. Georges/Club aéronautique de Beauce (CYSG) is not only renowned for its friendly and dynamic ambiance, but also for its unique group of pilots doing formation flying, the CAB Boys.

On Saturday, September 21, a video documentary about this unique flying activity was produced for Telus TV. On this occasion, twelve of the qualified pilots were present, but only 11 planes flew as one plane, an RV6, was down for maintenance. Its pilot acted as an aerial photographer aboard a Eurocopter EC120 Colibri.

This is how it went. After discussion with the video producer, the process began with a long briefing during which all the ground and air phases were covered in detail, including the positioning of the helicopter for the aerial takes. Beforehand, the aircraft had been placed on the ramp in their respective positions. With their run-ups completed, the eleven aircraft were ready to start simultaneously on cue, awaiting the radio call.

Radio check-in and engine started five seconds after reception of the classic command "Gentlemen, start your engines". Start and pre-takeoff checks completed, a second radio check-in is done followed by taxiing into position onto the 5,100 by 75-foot Runway 24 in sections of two, every 200 feet. Once #11 has reported in position, takeoff



of the sections is in Echelon right and at seven-second intervals. Climb-out to 1,500 feet above ground level (AGL) and a right turn are done at 95 mph and 400 feet per minute to allow the teammates to close in to their respective positions. Once assembled in a 'B2 Bomber' figure, the formation accelerates to a cruising speed limited to 110 mph in order for the outer wingmen to have some power reserve for the upcoming gentle turns.

Approaching from the northwest, the formation flew over the runway in a southeasterly direction for the overhead videos, then it was turned northward along the Chaudière River before passing over the townships of St-Georges and Beauceville, a distance of approximately 15 miles. These flyovers were done for the enjoyment of the local residents who appreciate the CAB Boys' contribution to local events such as Remembrance Day, the Walk for Life event and funerals for club members gone west (Missing Man) and opening ceremonies for local triathlons and car races.

In preparation for the return, the formation veered east and made a straight seven-minute run to perform the threesection separation procedure (4, 3 and 4) which results in a 30-second and half-mile spacing between each one. On the order "Three sections, three sections GO", the last section makes a 10mph speed reduction which is held for six minutes and then resumes cruising speed. The second section performs an identical manoeuvre three minutes after the command but maintains the speed reduction for three minutes only. The

formation is then placed in Right Echelon and returns to the airfield. Spacing during the run-in to the break is maintained using GPS distances and ground speeds as reported by the leader.

For the circuit and landing, the procedure for the overhead break establishes a spacing of 10 seconds between all aircraft once the two turns to downwind are completed. Initial approach to the runway is at 1000 feet AGL and at a speed of 100 mph in close formation. The breaking turns to the crosswind leg are done at five-second intervals, banking sharply to 30°. The leader of the second section must begin his break 20 seconds after the last plane of the previous section and so on. This part of the landing procedure results in the first five seconds of spacing being gained during the first turn, and the

THE CAB BOYS





◆ The CAB Boys are: #1, Michel Pomerleau (leader), original homebuilt Lesperance MP-Unik; #2, Bernard Poulin, Mooney; #3 Simon Drouin, Mooney; #4, Vincent Quirion, Piper PA-28; #5 Daniel Parent, Mooney; #6, Gilles Lessard, RV-9; #7, Raymond Rouillard, PA-28; #8, Tom Redmond, Mooney; #9, Tony Bolduc, Piper Arrow; #10, Pierre Vermette, CH 300; #11, Robert Bergeron, Cessna 170; #12 Hughes Drouin, RV6.

five additional ones during the turn to downwind. However, for the safety of the manoeuvres, it is imperative that the leaders of sections two and three place the last aircraft of the previous group at their one o'clock position upon completion of their 90° break turn and begin their turn to downwind five seconds after this plane has gone by their 12 o'clock.

Downwind, the 10-second spacing (which then equates to approximately 1.500 feet of distance between each aircraft) must be maintained until landing. Descent with a 3° slope begins upon starting the timed turns to base leg, simultaneously reducing to the final approach speed of 85 mph and configuring for landing by midbase. Evidently, slowing down brings spacing to 1,250 feet. Again, the final turns with 30° of bank are timed spaced again by each aircraft and the speed rigorously maintained until round out.

Landings in calm winds can be challenging with this reduced spacing due to the risk of wake turbulence. It is therefore imperative that all aircraft follow a straight slope trajectory, with the option of deviating slightly to the left or right, and maintain a constant speed until the flare. After landing, the planes move to the side to provide lateral space for any aircraft that may experience braking or control difficulties. Naturally, after returning to their respective hangars, the merry pilots congratulate each other before proceeding to the debriefing room.

Formation flying is a demanding discipline. The CAB Boys formation started very humbly in 2006. Initially, all manoeuvres and standard operating procedures were developed to accommodate aircraft with various performances ranging from the Cessna 150 to the Mooneys. Eventually, the climb speed went to 95 mph, cruise to 110 - 120mph and approach to 85 mph, resulting in the small Cessnas no longer qualifying for this endeavor, but they had already been traded away.

Qualification training includes a theoretical lecture, one preliminary evaluation flight and five to eight documented training flights with, progressively, two, three and four planes. In order to gain acceptance in the team, everyone had to master the finesse of hands and feet inputs required to maintain their designated position within a few cubic feet of space, and control speed and altitude very precisely in the circuit and the final approach. Constant discipline and outmost concentration are primordial. However, each pilot is encouraged to stay within their comfort zone for separation in their station keeping while gaining experience.

CAB Boy #12, Hugues Drouin, has produced a nine-minute video documenting this 11-plane formation flight. Check it out at vimeo.com/362373522. The password is 'cab'. Enjoy!



LES CAB BOYS VOL DE FORMATION DISSÉQUÉ

PAR MICHEL POMERLEAU



Le 46e Club de COPA / Club aéronautique de Beauce de St-Georges (CYSG) est non seulement renommé pour son dynamisme et sa bonne ambiance, mais aussi pour son groupe de vol en formation incorporant plusieurs types d'avions différents, les CAB Boys.

Samedi le 21 septembre avait lieu un événement spécial, soit le tournage d'un documentaire vidéo pour Telus TV concernant cette activité particulière. A cette occasion, il fut possible de réunir douze pilotes dont un qui ne pu voler avec le groupe - son RV6 étant en maintenance - mais qui agit comme photographe aérien à bord d'un hélicoptère d'escorte Eurocopter EC120 Colibri.

En voici le déroulement. Après s'être entendu avec le producteur de la vidéo, le procédé débuta par un long briefing au cours duquel toutes les phases terrestres et aériennes furent détaillées, incluant le positionnement de l'hélicoptère pour les prises de vue. Au préalable, les avions avaient été placés sur le tablier dans leur position respective et avec les points fixes complétés, cela afin de démarrer simultanément les onze avions au signal radio et être prêts à circuler immédiatement.

À l'heure prévue, vérification radio et démarrages cinq secondes après réception de l'ordre traditionnel « Gentlemen, start your engines ». Vérifications pré-envol, et après une seconde vérification radio, circulation pour positionnement deux par deux aux 200 pieds sur la piste 24 (5 100 par 75 pieds). Une fois que le dernier avion (le #11) s'est rapporté en position, les décollages se font aux sept secondes en formation sur l'aile. La montée jusqu'à 1 500 pieds sol et le virage à droite subséquent se font à 95 mph et 400 ppm afin de permettre aux coéquipiers de prendre position dans l'ordre

The CAB Boys in formation over the Quebec countryside.

établi. Une fois tous les avions regroupés, la formation prend une vitesse de croisière limitée à 110 mph afin de que les ailiers éloignés puissent conserver une réserve de puissance pour maintenir leur position durant les virages à faible inclinaison prévus.

Il y eut passage à la verticale de la piste en direction sud-est pour la prise de vue à partir du sol, suivi du survol de St-Georges et Beauceville en direction nord pour le bénéfice des résidents locaux qui apprécient toujours la vue de nos vols en formation. Car, il convient de mentionner que les CAB Boys sont en demande dans la région pour le survol d'événements civiques locaux tels le Jour du Souvenir pour effectuer la formation du Coéquipier Manguant (Missing Man), le Relais pour la Vie ou les funérailles d'un défunt membre du club, ainsi que des cérémo-

nies de départ pour le triathlon local ou courses automobiles.

En préparation pour le retour, la formation vira à l'est et fit un tracé rectiligne de sept minutes afin de procéder à la séparation du groupe en trois sections (4, 3, 4) espacées de 30 secondes et d'un demi-mile entre chacune. Sur l'ordre « Trois sections, trois sections GO », la dernière section doit ralentir de 10 mph pendant six minutes puis reprendre la vitesse de croisière. Trois minutes après avoir entendu le commandement. la deuxième section doit effectuer une manœuvre identique mais ralentir pendant trois minutes seulement. La formation est ensuite placée en Échelon droit lors du segment de retour vers l'aérodrome. Pendant ce traiet. l'espacement entre les sections est vérifié et ajusté en fonction des vitesses sol et distances GPS transmises par le leader.

Pour le circuit et l'atterrissage, le bris de formation à la verticale de la piste vise à placer tous les avions en vent arrière à 10 secondes d'intervalle. La procédure consiste à approcher la piste à 1 000 pieds en formation serrée à une vitesse réduite à 100 mph,. Lorsque le leader débute son virage à gauche, les avions de sa section suivent tour à tour aux 5 secondes en s'inclinant prestement de 30 degrés pour virer les 90 degrés de l'étape du vent traversier. Le leader de la section suivante doit débuter son bris 20 secondes après le dernier avion de celle précédente et ainsi de suite. Cette partie de la procédure donne les premières five secondes d'espacement et les cinq additionnelles s'ajoutent lors du virage en vent arrière alors que les avions effectuent le deuxième virage à cinq secondes d'intervalle. Toutefois, pour que les seconds virages soient sécuritaires, les leaders des sections #2 et 3 doivent s'assurer que le dernier avion de la section précédente se retrouve à la position d'une heure à la fin de leur virage initial et, après son passage à leur 12 o'clock, débuter leurs seconds virages

cinq secondes plus tard.

En vent arrière, l'espacement de 10 secondes donne approximativement de 1 500 pieds de distance entre les avions. Cet intervalle doit être maintenue jusqu'à l'atterrissage. La descente avec pente de trois degrés et le ralentissement à la vitesse finale de 85 mph débute avec le virage en base, point où tous les avions doivent se chronométrer aux 10 secondes. L'on vise à atteindre la vitesse d'approche et prendre la configuration finale pour atterrissage à mi-chemin de cette étape, la distance séparant les avions diminuant alors à 1 250 pieds. Une dernière vérification de l'espacement

« LES PILOTES ONT PERFORMÉ À LA HAUTEUR DE LEUR HABILITÉET SONT **EXTRÊMEMENT** FIERS DE LEUR ACCOMPLISSEMENT. »

par synchronisation a lieu au virage pour l'étape finale. Tous les virages doivent débuter prestement avec 30 degrés d'inclinaison et la vitesse maintenue rigoureusement jusqu'à l'arrondi.

Les atterrissages par vent calme peuvent représenter un certain défi en raison du risque de rencontrer de la turbulence de sillage. C'est pourquoi il est impératif que tous les avions suivent une pente et trajectoire rectilignes - avec l'option de se déporter légèrement à la gauche ou à la droite - et qu'une vitesse constante soit strictement maintenue jusqu'à l'arrondi. Après atterrissage, les avions se rangent sur le côté afin de permettre le passage à tout appareil pouvant éprouver des difficultés de freinage. Comme il se doit après le retour aux garages, les joyeux coéquipiers se congratulent avant de se rendre à la salle de débriefing.

Le vol en formation est une discipline exigeante. Le groupe des CAB Boys a débuté très humblement en 2006. Initialement, toutes les manœuvres et consignes d'opération ont été développées de façon à accommoder les avions aux performances diverses allant du Cessna 150 aux Mooneys. Toutefois, les vitesses furent éventuellement augmentées à 95 mph pour la montée, entre 110 et 120 mph en croisière et de 80 à 85 mph en approche, ce qui a éliminé les C-150 mais a donné aux Mooneys une plus grande marge de man'uvre et sécurité dans le circuit.

Le processus de qualification consiste en une présentation théorique, une envolée préliminaire avec le leader et des entrainements documentés et progressifs à deux, trois et quatre avions. Pour se tailler une place dans l'équipe, les pilotes ont dû développer une fine maitrise de leur appareil afin de pouvoir maintenir la position désignée dans un espace cubique de quelques pieds et contrôler très précisément vitesse et altitude dans le circuit et en approche. Une discipline et une concentration de tous les instants sont donc primordiales. Toutefois, chaque pilote conserve la latitude de se tenir à la limite de sa zone de confort et de confiance, la sécurité devant toujours prédominer.

Cette prestation des CAB Boys est une première de cette envergure car elle a regroupé onze avions alors que le nombre de huit n'a avait jamais été dépassé auparavant. Les pilotes ont performé à la hauteur de leur habilité et sont extrêmement fiers de leur accomplissement.

Pour immortaliser l'événement, une superbe vidéo de neuf minutes a été montée par Hugues, notre CAB Boy # 12. En voici le lien : Les Cab Boys version 2019: vimeo.com/362373522. Mot de passe : cab. 🐝

REGIONS ONTARIO

DOWNSVIEW OPEN HOUSE

BOMBARDIER-DE HAVILLAND WELCOMES FAMILIES AND FRIENDS

TEXT AND PHOTOS BY GUSTAVO CORUJO

De Havilland Canada and Bombardier hosted their annual Family Day at their Downsview, Ontario plant on OctOber 5. Employees, families and friends got a rare opportunity to tour the Bombardier-De Havilland facility at Downsview to learn how one of the leading aircraft manufacturers operates.

The behind the scenes tour included the assembling plants for the Turboprop DHC 8-400 and business jet like the Global 7500. The Family Day included live music, aircraft displays, kids' zones, military vehicles, food vendors and a flight demonstration by a DHC 8-400. 🕯











REGIONS BRITISH COLUMBIA

A LIFETIME OF ACHIEVEMENTS

COPA MEMBER GLENN OERZEN EARNS PRESTIGIOUS AWARD

BY STEVE DRINKWATER

When the British Columbia Aviation Council (BCAC) went looking for a worthy individual to honour with its annual Lifetime Achievement Award this year. there were a few nominations. After a review of the nominees, BCAC's award committee eventually focussed on one individual - Glenn Oerzen.

Oerzen has quite an impressive résumé. A private pilot licence holder since his 17th birthday, he followed it with a commercial licence on his 18th birthday (both licences self-financed from his earnings as a lifeguard). A military career saw him become a CT-114 Tutor flight instructor, followed by a full, two-year tour as a pilot in the Snowbirds demonstration squadron. Oerzen was then offered training on the CF-188 Hornet, which he turned down in favour of flying the CC-130 Hercules, as he was always attracted to big airplanes and long-distance flights, which operations involving the Hercules offered. Between Strategic Airlift operations, Oerzen was kept occupied flying Search and Rescue missions, especially in the Arctic. More long flights from the squadron's Winnipeg base.

It was 1996 and, at this point in time. Oerzen was Operations Officer for the Forces' 435 Squadron. A promotion to Major was pending and with it, a desk job. At this juncture, after serving as a military pilot for 12 years, Oerzen decided to retire from the Forces. He then hired on as a Dash-8 pilot with Air BC (which morphed into Air Canada Jazz). After nine months, Oerzen was moved to Air Canada's mainline operations.

Today, Captain Oerzen flies Air Canada's Boeing 777s, and there is no doubt that his résumé is indeed quite impressive. What was it, then, that clinched the award for Oerzen?



(From left) BCAC Executive Director Dave Frank, Captain Glenn Oerzen. BCAC Chair Heather Bell

Could it be that Oerzen has spent, and continues to spend, much time as a volunteer, helping to teach and mentor students in BCIT's aviation program, including taking them to Air Canada's flight simulator to give them exposure to multi-crew and training environments? And, that as an active COPA member, he also volunteers at COPA for Kids events at Boundary Bay

In the end, it was his volunteer work, on top of a stellar aviation career, that convinced the committee to the give the award to Oerzen, which was presented to him at the BCAC's Silver Wings gala at the Vancouver Trade and Convention Centre on October 24.

"We were delighted to award this year's British Columbia Aviation Council Lifetime Achievement Award to Glenn Oerzen," said Michael Dery, chair of the BCAC's Scholarship and Awards Committee in a statement to COPA Flight. "Our committee was in awe of Glenn's invaluable contributions of time and effort toward the development of young aviation professionals

over many years. For him to give so generously on top of his career commitments is most impressive!"

"Why me? There are so many amazing people in aviation in B.C., like people who run airports, large aviation companies and airlines," was Oerzen's first reaction when notified that he was selected for this year's Lifetime Achievement Award. He followed that with an admission that he was both humbled and honoured to have been selected.

Oerzen continues to fly recreationally and is especially proud of his recently acquired 1956 Cessna 172, serial number 71, a model that even precedes the introduction of the A model.

"I've been told, but I haven't verified, that it's the oldest 172 in Canada," Oerzen told COPA Flight.

COPA Flight congratulates Glenn Oerzen's for his lifetime of achievement, one that has clearly been All For Flight.

REGIONS QUEBEC

DÉCOUVRIR LA HAUTE-CÔTE-NORD

UNE DES RÉGIONS LES PLUS SPECTACULAIRES DU QUÉBEC

TEXTE ET PHOTOS DE JEAN-PIERRE BONIN

Située entre Tadoussac sur le Saint-Laurent et Colombier à l'est de Forestville et jusqu'à Sacré-Cœur dans le Saguenay, la Haute-Côte-Nord mérite que vous vous la survoliez.

Il y a une nouvelle piste privée aménagée aux Escoumins (PPR Totem Aviation, 581-235-5235) qui est en sable compact d'une largeur de 65 pieds dégagée sur 200 pieds et d'une longueur de 2 300 pieds additionnée de 100 pieds excédentaire à chaque extrémité pour un total de 2 500 pieds. Quand nous sommes de passage, nous logeons à Essipit mais il est possible de faire du camping sous l'aile à l'aéroport ou dans les lieux d'hébergement à proximité aux Escoumins.

Nous décollons en matinée car le soleil éclaire alors la côte qui s'offre ainsi dans toute sa splendeur. C'est un « saut de puce » vers l'aéroport des Grandes-Bergeronnes (CTH3) où nous effectuons un arrêt à la boulangerie artisanale La P'tite Cochonne située tout près du seuil de piste 10 aux Bergeronnes et attention, arrivez tôt car elle est « Ouverte quand c'est prêt et fermée quand il n'y en a plus ». À quelques minutes de marche de l'aire de stationnement, il y a des sentiers qui descendent vers la plage, un centre d'interprétation ainsi que le quai pour excursions aux baleines.

La piste des Bergeronnes fait 1 500 pieds par 50 pieds de large avec surface en asphalte. Elle est maintenant moins un « défi » depuis que la municipalité a dégagé le seuil de piste 28 de ses arbres, éliminant ainsi les obstacles à l'approche à partir du fleuve. Durant notre court transit entre les deux aéroports, un petit groupe de bélugas s'est trouvé près de la côte pour notre plus grand plaisir.





Nous reprenons notre vol vers Tadoussac et le Saguenay en prenant de l'altitude pour respecter les normes de survol du Parc marin du Saguenay-Saint-Laurent. La région habitée ne constitue qu'un mince fil le long de la route 138, le reste n'est que lacs et forêts et c'est bien cette portion qui impressionne habituellement les touristes européens.

Tadoussac n'est qu'à quelques minutes de vol et le village avec le fjord du Saguenay offrent une vue spectaculaire. Nous volons jusqu'à Sacré-Cœur avant de revenir aux Escoumins. Les champs en culture tout de jaune et de

The Grandes-Bergeronnes airport is seen in the photo immediately above and on the opposite page.

vert contrastent avec les bleuetières et les étendues de tourbières tous deux un peu rougeâtres.

De retour aux Escoumins, nous pourrons profiter des nombreux sites et activités touristiques pour quelques jours à venir.

Remarque: Si vous prévoyez de visiter ces aérodromes, apportez suffisamment d'essence, car aucun carburant n'est disponible sur les sites. 🐼

LA HAUTE-CÔTE-NORD QUEBEC'S SPECTACULAR UPPER NORTH SHORE



Located between Tadoussac on the St. Lawrence River and Colombier, east of Forestville and Sacré-Coeur in the Saguenay, the Upper North Shore (La Haute-Côte-Nord) merits a flying visit.

There is a new private runway at Les Escoumins (PPR Totem Aviation, 581-235-5235) which is made of compact sand with a width of 65 feet (cleared over 200 feet) and a length of 2,300 feet, with 100 feet of overrun at each end for a total of 2.500 feet. When in the region, we stay in Essipit, but it is possible to go camping under the wing at the airport or in accommodations near Les Escoumins.

We took off in the morning because the sun then illuminates the coast for the photographer's delight. It is a short hop to the Grandes-Bergeronnes airport (CTH3) where we stopped at the artisanal bakery La P'tite Cochonne located near the threshold of Runway 10 at Les Bergeronnes. Caution: arrive early because it is 'open when it is ready and closed when there is no more'. A few minutes' walk from the parking area there are trails leading down to the beach, an interpretation centre and a dock from where whale-watching excursions depart.

The Bergeronnes runway is 1,500 by 50 feet wide and has an asphalt surface. This short runway is now less of a challenge since the municipality cleared the threshold of Runway 28 of its trees, eliminating obstacles on final approach from the river. During our short transit between the two airports, a small group of beluga whales were near the coast for our greatest pleasure.

We resumed our flight to Tadoussac and Saguenay by climbing to meet the overflight minimums of the Saguenay-St. Lawrence Marine Park. The inhabited region is only a thin line along Highway 138; the rest is only lakes and forests and it is this portion that usually impresses European tourists.

Tadoussac is only a few minutes away and the village with the Saguenay Fjord offers spectacular views. We flew up the Saguenay River to Sacré-Coeur before returning to Les Escoumins. Fields in yellow and green cultivation contrast with the blueberry fields and peat bogs, both of which are somewhat reddish.

Back to Les Escoumins, one can take advantage of many sites and tourist activities for a few days to come.

Note: If you plan to visit these aerodromes, bring enough fuel as none is available on site. 🐼



REGIONS ATLANTIC + MARITIMES

NEWFOUNDLAND'S FLYING BOAT FESTIVAL

OVER 400 GATHER AT HISTORIC SEA PLANE BASE

BY LAUREN NAGEL

While most of us would settle for a single witness to our best landings. one seaplane crew was welcomed by an adoring crowd upon their arrival in Botwood, Newfoundland and Labrador this past August. Few outside this community are aware of the Flying Boat Festival that takes place in Botwood each summer, with fun activities planned for an entire long weekend. The festivities celebrate the flying boats that created the initial phase of commercial transatlantic aviation. an industry that put Botwood on the map back in 1937. This town harbours a rich piece of Canadian aviation history, though an actual flying boat had, until this year, not landed there in years.

Botwood became an important centre for military and aviation activity in the 1930s, in addition to its role as a shipping port. Its importance grew significantly when, in 1933, Charles and Anne Lindbergh stopped in Botwood in their Lockheed Sirius floatplane and declared it an ideal location as a terminus for transatlantic flights. On July 6, 1937, this vision became fact as Pan American's Clipper III seaplane (a Sikorsky 42) departed Botwood for Foynes, Ireland at the same time as British Imperial Airways' Caledonia (a Short Empire) departed from Ireland on the opposite route.

With the successful arrival of both aircraft, transatlantic commercial flight in airplanes over the North Atlantic was born. This success was followed by more transatlantic passenger flights in 1939, including the introduction of Pan American's luxurious Boeing 314 Yankee Clipper, which made it more appealing to the adventurous and wellheeled traveller. Botwood remained an important base during the Second



World War as any passengers travelling to or from North America did so via the seaplane port. After 1945, the use of flying boats declined as land planes became more popular, though the town still memorializes them with the Flying

Many years later, in 2019, one crew brought a flying boat back to the festival: cross-Canada Veebee explorers Euclid Benoit (pilot), Doug Tudor (copilot), Jan Benoit (safety officer) and Joan Hutchins (morale officer).

Boat Museum and Festival.

On August 5 the Flying Boat Festival was at its peak, culminating with the holiday Monday celebrating Botwood Day. The Veebee crew made a point to arrive on this day, approaching the town while communicating with their on-theground contacts: a local pilot and an air traffic controller on leave from the military. They performed a low fly-by of the port area where hundreds of festi-

Euclid's Veebee (a Republic Seabee decertified and re-registered as a homebuilt) on Botwood's slipway.

val goers waved and cheered them on. They then landed on the water near the festival area, water-taxied toward the slipway, lowered their wheels and taxied up the slipway where around 400 people were gathered. Throughout the entire arrival the crowd was energetic and excited to see the first flying boat arrival in years.

"It was a great day and evening with the festivities continuing well into the wee hours, well after we had retired," said pilot Euclid. Before leaving the port, they let dozens of excited children take turns sitting in the cockpit and having photos taken with their families.

The residents and visitors to the Botwood Flying Boat Festival proved that they, too, were All For Flight!

ON THE HORIZON

REGULARLY HELD EVENTS

AIRDRIE, AB (CEF4)

Flight 134 - Monthly meeting First Thursday 19:30. airdrieflyingclub.ca

ARNPRIOR, ON

Flight 33 - Monthly meeting on the 2nd Wednesday at 19:00

BANCROFT, ON (CNW3)

Flight 119 — Bancroft Flying Club monthly meeting last Monday, 19:00, except Jul, Aug & Dec.

BEAVERLODGE, AB (CYQU)

Flight 184 — Monthly meeting 3rd Tuesday September to April 19:30, Terminal Building second floor boardroom. wpaa@telus.net

BONNYVILLE, AB (CYBF)

Flight 90 — Monthly meeting last Monday 19:00, Terminal building, facebook.com/ bonnyvilleflyingclub

BORDEN, ON (CNV8)

Flight 84 — Borden Flying Club monthly meeting 3rd Saturday 10:00. bordenflyingclub.com

BOUNDARY BAY, BC (CAK3)

Flight 5 - Boundary Bay Flying Club monthly meeting, 2nd Wednesday 19:30. copa5.wordpress.com

BRANTFORD, ON (CYFD)

Flight 148-Brantford Flying Club monthly meeting, 3rd Wednesday 19:00 Clubhouse copa148.com

BUTTONVILLE, ON (CYKZ)

Flight 44 - Buttonville Flying Club. 2nd Wednesday of the month at Buttonville Hangar 15 19:00. (Except July) buttonvilleflyingclub.com

CALGARY, AB (CYBW)

Flight 114 - Monthly meeting 2nd Wednesday Hangar Flight Museum.

CARLETON PLACE, ON (CNR6)

Flight 121 - monthly meeting last Saturday

CHARLOTTETOWN, PEI (CYYG)

Flight 57 - PEI Flying Association

CHATHAM-KENT, ON (CYCK)

Flight 203 - COPA YCK monthly

CLARENCE-ROCKLAND, ON

Flight 132 - Monthly meeting 1st Thursday 20:00, 3984 Indian Creek Road. crmartel45@gmail.com

COLD LAKE, AB (CEN5)

Flight 205 - Monthly meeting

CORNWALL, ON (CYCC)

Flight 59 - Monthly meeting 2nd Saturday 09:00, earfran@bell.net

DAWSON CREEK, BC (CYDQ)

Flight 183 - Mile Zero Flying Club monthly meeting last Thursday. rfolster@pris.ca

DRAYTON VALLEY (CER3)

Flight 186 - Monthly meeting 2nd praa.clubinfo@gmail.com

EDMONTON, AB

Flight 176 - Monthly meeting 1st Thursday 19:30. Alberta Aviation Museum. treasurer@copaedmonton.ca

ESTEVAN, SK (CYEN)

Flight 3 - Monthly meeting 2nd Tuesday of every 2nd month 19:30, Mainmterminal building. Nealandnadine@hotmail.com

FREDERICTON, NB

Flight 2 - Monthly meeting 19:00 2nd Tuesday, Bloor St. Church. raystl@nbnet.nb.ca

GODERICH, ON (CYGD)

Flight 45 - Monthly meeting 19:30 Clubhouse or terminal check copa45.com for updates.

GRAND FALLS-WINDSOR, NL

Flight 195 - Monthly meeting 19:00, 3rd Tuesday community room, IBEX Fuels. wallypennell@hotmail.com

GUELPH, ON (CNC4)

Flight 1 - Monthly meeting 19:30 1st Tuesday, Guelph Air Park Café. brianoates@hotmail.com

HANOVER, ON (CYHS)

Flight 54 - Monthly meeting 09:30 - 10:30 2nd Saturday, CYHS SMA Boardroom. barrytschirhart@wightman.ca

HAVELOCK, NB (CCS5)

Flight 27 - Havelock Flying Club weekly Fly-in/drive-in breakfast, 08:00 - 10:00 every Sunday. havelockflyingclub.ca

HAWKESBURY EAST, ON (CPG5)

Flight 131 - Monthly breakfast meeting 08:30 1st Saturday, Club 131 - Déjeuner mensuel 08h30 1er samedi. flight131.copanatonal.org

HINTON, AB (EE4)

Flight 126 – Monthly meeting 19:00, 2nd

Wednesday, Clubhouse/Terminal building.

LIST YOUR EVENT IN COPA FLIGHT

Email your events to *membership@* copanational.org for inclusion in COPA Flight's On The Horizon section. Deadline is the first day of the month prior to publication.

10:00, ctwinter@gmail.com

members' breakfast, every Saturday Smitty's, ON University Ave 08:00. 902-626-6963 or brian@brianpound.ca

meeting 2nd Monday 19:00. tim@schinkels.ca

bi-weekly Thursday 16:30, Terminal building. jayconlin@hotmail.com

Thursday 19:00. Break July and August.



MADE FOR HARSH CANADIAN WINTERS!

Manufacturers of a Complete Line of **Premium Quality Aircraft Covers including:**

- Wing and Tail Covers
- Insulated Engine Covers
- Windscreen, Cabin, and Canopy Covers
- Cowl Plugs

We also manufacture

- Standard and Custom Made Windsocks
- Stainless Steel Revolving Windsock Frames
- Our Famous Canadian Flag Windsock

LOCATED IN ORILLIA, ONTARIO

1-800-461-4589 • info@aerocovers.com • www.aerocovers.com



ON THE HORIZON

INNISFAIL, AB (CEM4)

Flight 130 - Innisfail Flying Club monthly meeting 19:30 3rd Thursday, Terminal building. heaton.bd@gmail.com

IRON CREEK, AB (CEK6)

Flight 157 - Monthly Fly-in for coffee and goodies, 09:00 - 13:00 3rd Saturday. shelley@cciwireless.ca

KAMLOOPS, BC (CYKA)

Flight 82 - Kamloops Flying Club monthly meeting 19:00 1st Monday clubhouse. kamloopsflyingclub.com

KELOWNA, BC (CYLW)

Flight 36 — Kelowna Flying Club monthly meeting 19:00 1st Tuesday kelownaflyingclub.com

KINGSTON, ON (CCE6)

Flight 109 — Monthly meeting 09:30 1st Sunday, Camden east airfield. youcanreachusat@hotmail.com

KITCHENER, ON (CYKF)

Flight 26 — Breslau Flyers monthly meeting 19:00 2nd Tuesday upstairs classroom Waterloo - Wellington Flight Centre. copaflight26.com

LAC LA BICHE, AB (CYLB)

Flight 165 - Monthly meeting 3rd Monday at 19:00, Terminal building. laclabicheflyingclub.ca

LETHBRIDGE, AB (CYQL)

Flight 24 — Lethbridge Sport Flyers weekly breakfast, 07:30 every Saturday. lethbridgesportflyers.com

LINDSAY, ON (CNF4)

Flight 101 - Kawartha Lakes Flying Club monthly meeting, 19:00 1st Wednesday at LCVI high school, klfc.ca

LONDON, ON (CYQS)

Flight 75 — Wednesday BBQ's from June — September 17:30 -19:00. Meal and drink \$7. More info: 519.476.8324

MAPLE CREEK, SK (CYQ4)

Flight 208 - Maple Creek Flying Club monthly meeting, 19:00 1st Thursday of every month. Maple Creek Airport Club House. mcflying@mail.com

MEDICINE HAT, AB (CYXH)

Flight 171 - Gas City Aviators monthly meeting 19:00 last Thursday. Iclarkso@telus.net

MIRAMICHI, MB (CYCH)

Flight 39 - Monthly meeting 19:30 1st Wednesday, clubhouse, nbdbrown@nbnet.nb.ca or 506-625-5788

NANAIMO, BC (CYCD)

Flight 91 - Nanaimo Flying Club monthly meeting 09:30 3rd Sunday. nanaimoflyingclub.org

NELSON, BC (CZNL)

Flight 87 — Nelson Pilots Association monthly meeting, 18:00 3rd Wednesday, terminal building, nelsonpilots.ca

NORTH BAY, ON (CYYB)

Flight 23 - Monthly meeting 19:00 2nd Monday, flyingnorthbay.ca

OLDS DIDSBURY (CEA3)

Flight 142 - Monthly meeting 2nd Saturday Coffee and donuts and discounted fuel Okotoks, AB (CFX2).

Flight 81 - Monthly meeting 19:30 last Monday, Okotoks Elks Hall foothillsflvinaclub.com

OLDS-DIDSBURY, AB (CEA3)

Flight 142 - Old Didsbury Flying Club monthly meeting, 19:30 1st Tuesday. 403-701-1600

OSHAWA, ON (CYOO)

Flight 70 - Monthly meeting 19:30 1st Thursday, copa70.com

PONOKA, AB (CEH3)

Flight 187 - Monthly meeting 19:00 1st Monday, airport terminal. drew@flyingwatsons.ca

PENTICTON, BC (CYYF)

Flight 50 — Penticton Flying Club monthly meeting 19:00 2nd Tuesday. ronjohnson@telus.net or 250-493-0441

PETERBOROUGH, ON (CYPQ)

Flight 34 — Monthly meeting 19:00 2nd Wednesday, tommoore@live.ca

PICTON, ON (CNT7)

Flight 53 — Monthly breakfasts 08:30 - 10:30 2nd Sunday April — October (Except June) Prince Edward Flying Club. 613-403-4809

PITT MEADOWS, BC (CYPK)

Flight 16 - Aero Club of BC monthly meeting 19:30 1st Wednesday. aeroclubofbc.ca



ON THE HORIZON

PONTIAC, QC

Flight 169 - Monthly breakfast meeting at restaurant Aylmer, 1st Saturday. Club 169 - Déjeuner mensuel a restaurant Aylmer, 1er samedi, 819-360-0706 ou 812-329-2830

PRINCE GEORGE, BC (CYXS)

Flight 79 - Monthly meeting 19:30 2nd Wednesday. pilotpg@telus.net

QUALICUM BEACH, BC (CAT4)

Flight 76 - Parksville - Qualicum Aero Club monthly meeting, 19:00 1st Tuesday of odd numbered months at QBFC clubhouse. portal.clubrunner.ca/100860

QUEBEC, QC

Flight 168 - Monthly meeting, various locations 19:30 3rd Monday, Club 168 - Rencontres mensuel, lieux varies 19h30 3ieme lundi, 418-889-9023

RED DEER, AB (CYQF)

Flight 92 - Red Deer Flying Club Monthly Meeting 19:30 3rd Monday, Flying club building, 403-350-5511

RUSSELL, MB (CJW5)

Flight 138 - Monthly meeting 20:00 1st Wednesday, Russell Flying Club clubhouse, wrwile@gmail.com

SASKATOON, SK (CYXE)

Flight 10 - Monthly meeting 19:00 2nd Tuesday, SK Aviation Museum classroom, copasaskatoonraa.com

SARNIA, ON

Flight 7 — Monthly meeting 4th Monday 19:00, Naval Association 403 Wing. jkwood 99@yahoo.com

SEDGEWICK, AB (CEK6)

Flight 157 - Iron Creek Flying Club monthly meeting, 2nd Thursday 19:30. shelley@cciwireless.ca

SHOAL LAKE, MB (CKL5)

Flight 162 — Shoal Lake Flying Club monthly meeting, 19:30 2nd Tuesday of every 2nd month, terminal building. slflyingclub.com

SUNDRE, AB (CFN7)

Flight 146 — Sundre Flying Club monthly meeting 19:30 2nd Thursday. 403-638-7370 or winnmy@telusplanet.net

TISDALE, SK (CJY3)

Flight 93 — Monthly meeting 3rd Monday Sep-Jun 19:30 - 21:00. Terminal building, tisdaleaviation ca

VAL D'OR, QC (CYVO)

Flight 192 - Monthly meeting 18:00 2nd Tuesday, Hangar Q-60. copaflight192@yahoo.ca

VERNON, BC (CYVK)

Flight 65 - Vernon Flying Club monthly meeting 19:00 3rd Tuesday, VFC Clubhouse, flyingclubvernon@gmail.com

Flight 65 - Vernon Flying Club monthly pancake breakfast, 09:00 4th Sunday starting January 27th, 2019. Fly-in, drive-in, or walk in. Everyone is welcome. flyingclubvernon@gmail.com

VERMILLION, AB (CYVG)

Flight 204 - Monthly meeting 2nd Wednesday. vrflyingclub@gmail.com

VICTORIA, BC (CYYJ)

Flight 6 - Victoria Flying Club monthly meeting 19:00 1st Tuesday. copaflight6@gmail.com

WELLAND, ON (CNQ3)

Flight 149 - Monthly meeting 19:00 3rd Tuesday, verburgam@aol.com

WESTLOCK, AB (CES4)

Flight 139 — Westlock Flying Club monthly meeting, 19:30 3rd Thursday, terminal building. dan@syz.com or 780-961-2213

WETASKIWIN, AB (CEX3)

Flight 51 — Wetaskiwin Flying Club monthly meeting, 1st Tuesday, terminal building, scottcoggan@hotmail.com

WETASKIWIN, AB

Flight 51 — Flying Club monthly Fly-in 09:00 - 11:00, 4th Saturday starting January 26th until December 28th. Coffee and treats will be served

WIARTON-GEORGIAN BLUFFS, ON

Flight 68 - Monthly meeting 09:30 1st Saturday. terminal building. copaflight68@outlook.com

WHITECOURT, AB (CYZU)

Flight 185 — Monthly meeting various locations 19:00 3rd Tuesday. 780-778-0854

WOODSTOCK, NB (CCD3)

Flight 86 — Woodstock Flying Association monthly Fly-in and meeting, 08:00 -1st Saturday, clubhouse, 506-356-5025



Reliable and Dependable Service Since 1964 / Under New Ownership 1(705) 687-4343 • info@lakecentral.com 1016 Sabre Lane • Muskoka Airport (CYQA) • Gravenhurst, ON • P1P 1R1



General Aviation Maintenance STC Product Installation

Avionic Upgrades Available

Altimeter, Transponder, Mode C & S, ADS-B Recertification

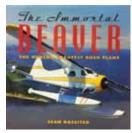
www.lakecentral.com



PEOPLE, PLACES AND **PLANES**

Grassroots Aviation, Sport Aviation, Recreational Flying — Call it what you may, this is a book for people with a passion for airplanes, for classic airplanes, for flying off a grass field, for rebuilding, restoring and generally messing around in hangars with airplanes and other people of like interest.

By Mike Davenport Price: \$34.95 (includes shipping)

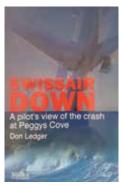


THE **IMMORTAL BEAVER** Developed soon after

World War II. the de Havilland Beaver

has become one of the most successful and long-lived designs in aviation history. The Beaver was adopted worldwide, and in certain jobs it has yet to be surpassed. This colourful retelling of the Beaver saga also captures the unforgettable characters behind the airplane.

By Sean Rossiter Price: \$34.95 (includes shipping)



SWISSAIR DOWN

September 2nd. 2019 marks the 21st anniversary of the crash of Swissair Flight 111 off the coast near Peggy's Cove. Nova Scotia with the

loss of 229 lives. Author and pilot Don Ledger carefully re-creates what took place in the cockpit of the stricken airliner, describing each link in a disastrous chain of events.

By Don Ledger

Price: \$27.50 (includes shipping)



GEMINI FLIGHT

Born in Nanton, Alberta, identical twins Bruce and Douglas Warren trained together at High River and Medicine Hat, Alberta. They went

on to fly Spitfires together, completing their wartime service as the two flight commanders on 66 Squadron. Following the war, both made significant contributions to the Royal Canadian Air Force during the Cold War.

By Douglas Warren Price: \$26.95 (includes shipping)



JOHNNY

Air Commodore John Fauquier, 'Johnny' was Canada's most decorated airman. He did it all during his flying career as a bush pilot, flying instructor,

bomber pilot, squadron commander, pathfinder, master bomber, base commander, and finally leading the legendary 'Dambusters' squadron as they dropped 22,400 lb Grand Slam bombs on Nazi targets.

By Dave Birrell

Price: \$29.95 (includes shipping)



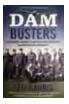
THF CANADIAN AIR FORCE AT HIGH RIVER

When the Canadian Air Force was formed in 1923, the High River Air Station was the busiest

in the country. The air force returned to High River in earnest in 1941 with the Calgary Aero Club and the RCAF together, operating a very successful Elementary Flying Training School.

By Dave Birrell

Price: \$21.50 (includes shipping)



DAMBUSTERS

Based on interviews, personal accounts, flight logs, maps and photographs of the Canadians involved, Dam Busters recounts the dra-

matic story of the young Commonwealth bomber crews tasked with a high-risk mission against an enemy prepared to defend the Fatherland to the death.

Author: Ted Barris

Price: \$35.50 (includes shipping)



AIRBORNE

In this story of a father and son. Jonathan decided to track down the object that had once given his father so much joy: a tiny single-seat

biplane called Charlie Foxtrot Foxtrot Alpha Mike and retrace his father's airborne life.

By Jonathan Rotondo Price: \$29.95 (includes shipping)



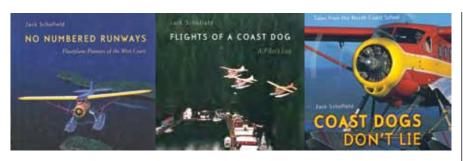
OTTER AND TWIN OTTER

The compelling tale and a beau-

tifully illustrated homage to two of the world's greatest aircrafts and of the engineers and pilots who made the Otter and Twin Otter aviation legends.

By Sean Rossiter

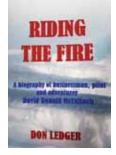
Price: \$34.95 (includes shipping)



THE COAST DOG SERIES

Flights of a Coast Dog-a BC Book Award and West Coast bestseller along with its sequel, Coast Dogs Don't Lie, and some significant B.C. aviation histories in a revised edition of No Numbered Runways, make up the trio of great flying yarns with a BC Coastal flavour.

Author: Jack Schofield | Publisher: Coast Dog Press Price for the set of 3—\$93.00 (includes shipping)



RIDING THE FIRE

Riding The Fire is the biography of businessman and pilot, David Mc-Culloch, whose adventures around the world

are covered in this book. He stacked up over 180 countries in his travels. All of his trials and tribulations are related in this biography that reads more like a novel; a rags to riches saga.

By Don Ledger Price \$28.95 (includes shipping)



LOST: UNSOLVED **MYSTERIES**

One of the themes that runs through this book is the enigma of aircraft that disappear, some-

times within miles of busy airports and crowded cities, and cannot be found despite desperate and prolonged searches.

By Shirlee Smith Matheson Price: \$26.95 (includes shipping)



YUKON WINGS

An illustrated history of the birth and development of the aviation industry in the Yukon. Filled with hundreds of superb

previously unpublished photographs, this is an astonishing book of ingenuity and determination in the face of unrelenting setbacks.

By: R.B. Cameron Price: \$85.00 (includes shipping)



BEST SEAT IN THE HOUSE

Jim Griffith and Trans Canada Airlines were both born at about the

same time and grew together over the decades. Griffith experienced the history of Canada's national airline and this book tells the story of both.

By Jim Griffith

Price: \$34.00 (includes shipping)



MILES TO **MILLIONS**

The senior captain for Air Canada showed up for every flight even as he built a real estate empire worth a billion dol-

lars. Grenier's ready wit and the many twists and turns of a penniless 19-yearold commercial pilot's career built on perseverance and the willingness to take risks takes readers on an unusual journey, even for the the aviation industry.

By Bill Grenier

Price: \$35.95 (includes shipping)



FARM BOY TO FLY BOY

Fascinating and insightful, this book will appeal to those who are fascinated by the military and flying as well as those who are

simply seeking a first-person account of what life was really like for the men and women who served in the RCAF throughout one of the most pivotal periods of twentieth-century history.

By: Col [Ret] G. Brennand Price: \$24.75 (includes shipping)



AMAZING FLIGHTS AND **FLYERS**

A collection of true aviation stories that graphically demonstrate the almost

super-human endurance and tenacity of aviators in life-or-death situations — including mid-winter medical evacuation flights; CASARA members searching for lost people and planes; and the determination of aviation pioneers. All are remarkable stories, and most are little-known.

By Shirlee Smith Matheson Price: \$24.95 (incl. shipping) | CLASSIFIED SECTION |

FEATURED LISTINGS FOR DECEMBER, 2019



1998 MOONEY M20K ENCORE 1,241.8 hrs TT; 150 hrs STOH. The only true Encore on the market! Considered by many as the best Mooney ever built! The Encore personifies high performance and high economy. ADS-B compliant, GTN-650, WAAS, TIS-B Traffic, Aspen glass panel, much more! U\$217,000. Aviation Unlimited 905-477-0107 x 225 (2247.18130)



GREAT RV9A 420TTSN Professional build, exc condition. Lyc O-320, Sensenich prop, mode-c, AP-TruTrack, Lightspeed ignition, D10A, GD Rapids EIS, Garmin 696. Radio IC-A200 x 2, EIS. Carpet and leather upholstery. Recent annual. \$88,000. 613-884-4101 cwwatters@rogers.com (2610.19448)



PORTABLE **FOLDING** WWW.PORTA-BOTE.COM Great for fishing and hunting. Take it anywhere you can go. Be safe with the lightest, durable and stable folding boat. Gilles Berthiaume 514-592-4186 gberthiaume@alpha-vico.com (3135.18821)



CH300 TT all 200hrs. O-320 certified rebuild. Dig CHT, EGT, fuel flow oil filter, 4-place Cessna seats. Garmin encoding transponder, GPS. Always hangared. I am 75, time to quit flying. \$22,000.780-853-0237



2009 MURPHY MOOSE SR3500 TT 400 hrs Airframe, Amphib Floats, wheel Skis, M14PF-XEDK 458 BHP, fuel injected electronic ignition, 120 U.S. gal fuel capacity. \$225,000 (3671.19212)



REPLICA EXPERIMENTAL TTSN 1800 hours on airframe. Factory new 0-360, 45 hrs on Hartzell HC-C2YK-18F, Empty weight 1315, Gross Weight 2200, 2139 Peck Floats, 3-inch extended gear, 3200 Scott. C\$100,000 gdixon7671@gmail.com or 902-648-



1997 BEECHCRAFT A36 BONANZA 2,896 hrs TT; 931 hrs SMOH; 931 hrs SPOH. PRICED TO SELL NOW! Dual Garmin G5 units Garmin GTN-750 KFC-200, will deliver with "N" number. Fresh annual inspection (Sept. 2019)! 1271 lbs useful load! \$299,900 USD CAD Aviation Unlimited 905-477-0107 (2247.19655)



1980 PIPER P28B-236 DAKOTA 705SMOH, 160SPOH Meticulously maintained, new paint 2014. No accident/incident history, no corrosion, immaculate interior. Always hangared. Collins Micro-Line COM251/NAV351, ADF 650A, DME 451, TDR 950, Autocontrol IIIB, Storm Scope, new 406 ELT, annual completed October 2019. Useful 1178 lbs. PRICE REDUCED \$134,900 CAD alan@bell.net, 289-440-4568. Located at CYFD (3456,19526)



2010 BARON G58 Only 1227 TTAE one owner & NDH! G1000 w/GFC700 FIKI, 6-place w/club & desk, Skywatch Traffic, GDL69A WX DataLink and colour GWX68 radar, WX500 Stormscope! \$725,000USD Apex Aircraft Sales www.apexaircraft.com or 905-477-7900 (2245 18169)



CESSNA T206G 1979 AMPHIBIAN on Wipaire 3730 amphibs For Sale, New Garmin Avionics, A/P, RSTOL, 0 Prop SMOH, many options, very clean. Low time Contact: Wilson Aircraft Ph: (647)227-6996 (586.18797)



AFFORDABLE TRANSPORTATION! 8533 TTSN, 3091 SMOH, 1000 STOH (75/78/78) INCL NEW CAM. \$45,000 CAD. PLÉASE CALL! Apex Aircraft Sales. 905-477-7900 www. apexaircraft.com (2245.18180)



built Foster 001 GM Engine, Robinson gearbox. TT 53 hrs since construction. GW3800 \$95,000 CDN. Roger 819-336-4181 after 6pm ET (3144.19621)



The New C-172s • C-182s • C-206s



CALL US ABOUT THE NEW CESSNA 182 SKYLANE!

2013 Partenavia P.68R, 493 TTSN, GarminGFC950 and Full Delce, Like New! \$650,000 USD
2012 T206H Amphib w/WheelGear! 600TT,G1000/GFC700,Loaded!\$ \$625,000USD
2012 MalibuMirage,735TTAE,G1000,140USG!
2010 Baron G58, 1100 TTAE, G1000 Avionics!\$725,000 USD
2007 Cessna 400, 605 TTAE, G1000/GFC700, GDL69A WX DataLink
2003 SR22, 1750 TTAE, Dual G430's, STEC 55X, Stormscope, Skywatch!
2002 Piper Super Cub Replica, 187 TTAE, Amphibs/Wh Gear!
2002 DA20 C1, 3526TT, '0' SMOH, FreshAnnual! \$160,000 USD
1998 C182S, 1285TT, 355 SFOH & SPOH, Aspen EFD1000/SVT/Garmin GTN750 \$219,900 USD
1992 Bonanza F33A 13086TT/1043SM, King w/KCS55A,KLN94 GPS!
1989 Grumman Clipper,2689TT,500STOHw/NewCylinders,W/shield/Canopy/2015 \$19,000 CAD
1982 Mooney Rocket 305, 3170TTSN, CONT TSI0520
1981 Cessna 414A, 4925TT, 1204 SM, RAMVII, Garmin530/430! \$399,900 USD
1981 Chieftan Panther, 7679 TT, 1124 SM, Corporate! \$245,000 USD
1981 Duke B60, 4507TT, 1092 L&R, G530W, KFC-250 IFCS, Winglets!
1980 Saratoga, 4660TT/1759SM, KingDigitalw/KAPI50AP/HSI!
1980 A185F Amphib, 3645/545SNEW/I0550/Aerocet3400, GTN750!
1979 T210N, 2190 TT, 603 SM, Flint Tips! Loaded!\$249,900 USD

1979 SierraC24R, 2500TTAE, Fresh Annual!\$44,000 USD
1979 C185F Amphib, 2849TT, 849SM, GarminPanel,NEWWhip3000AmphFloats!
1979 Warrior, 12953 TT, 290 SMOH, Garmin GPS400, GTX335 Tspdr (ADS-B Out) \$39,500 USD
1977 Mooney 201, 5492 TT, 1529 SMOH, Prop/2016, Fresh Annual, Garmin 530 GPS! \$74,900 USD
1977 Cessna 172N Skyhawk, 11630TT/1075SM, Garmin 530 GPS!
1977 Cheetah, 4263 TT, 1963 SMOH, All Logs and NDH! Pictures on our website!\$33,900 USD
1977 Cheetah, 4263 TT, 1963 SMOH, All Logs and NDH! Pictures on our website! \$33,900 USD
1975 C177RG,5802TT,1731SM,GNS530W GPS!\$55,000 USD
1974 414 6905TT, 1118SM, Full De-Ice
1974 Navajo Panther, 8360TT/552SM, GTN750/650,STECA/P,ADSB \$279,900 USD
1974 Chieftan, 12749TT/1956/826SM, Commercial Aircraft!
1973 T310Q, 2965 TTSN, 1965 L&R, GNS520W and GNS430, GTX345 ADS-B
1973 C172M, 14575TT, 158SM, King Avionics, G2Eng Monitor!\$68,000 CAD
1968 C185 Amph,1696TT,637SM,G500/GTN750,GTS800Traffic,Whip3730's!
1968 C177 Cardinal, 2918TT, 51SMOH(2016), New Prop (2016), Price Reduced to \$42,500.00 USD
1966 C337A Skymaster, 3184TT,628/148SM, CurrentCofA,PropsDue! \$100,000 CAD
1946 J3 CUB,w/PA11 STC's, 5450TT, 550SMOH,
1943 Grumman G44 'Widgeon'8929TT,418SM,GTN750, Summer Ready! \$275,000 USD

FEATURED LISTINGS FOR DECEMBER 2019



AN AVIATION GIFT IDEA FOR YOUR FAVOURITE AVIATOR. ANR Bluetooth carbonfibre. Proven quality \$685. COPA members receive extended warranty. Free RFID pilot passport leather wallet w/purchase of a headset. RS Designs aviationheadsets.ca Ph. 204-726-4221

(3052.18815)



1971 CESSNA 172L SKYHAWK SN 172-59751. Beautiful aircraft inside and out. Fresh annual, 3020 TTSN. 147 SMOH Lycoming (overhauled by Okanagan Aero), O-320-E2D, 160 HP Ram conversion, new style powerful exhaust, new tires, wheel pants, Horton STOL, tail abrasion strips, articulating pilot seat, tail strobe, new four-place intercom, ACK 406 ELT installed on last annual. Garmin Pilot III GPS, King KMA 12B audio panel, I COM IC-A210 Comm, Mode C King KT 78 xpdr, Narco ADF, Pilots PPT, OAT gauge, pitot heat, 38-gal fuel, EGT gauge, new no maintenance battery and battery tender. View more pictures and video online at canadianplanetrade.ca. Aircraft highly maintained and in pristine shape. \$67,000 USD Dennis 306-540-7870 or dennis.selenski@hotmail.com. Regina, SK (3735 19566)



2017 CAVALON AUTOGYRO 110hrs TT A&E. Rotax 914. Electric IvoProp. ELT, Kannad AF-406. Transponder, Mode S; F.U.N.K.E. TRT800H. Radio F.U.N.K.E. ATR 833-11. Dynon SkyView 10. Card Compass. "AutoGyro's" 31/8" ALT & ASI with GS. Four point harness. Heated leather seats. Pneumatic lumber support. Two axis trim. Cabin heating & Defogging. O/H pleated Sun Shade. Cockpit lighting, Nav Lights & Strobes. \$150,000 Contacts: Gordon Hindle, hanne.gordon@shaw. ca 778-351-1343 or David Sigier, info@airprogyro.com 418-580-8912. (3569.19627)



CESSNA 180H 1964 - 6 PLACE Serial #180 51470. Airframe TTSN: 5462 hrs. Continental engine 04 70; 230 HP w/20 hrs SMOH (Alberta Aero Engine 2019). McCauley prop 2A34C2D3-C, 20 hrs TTSN (Propworks Alberta Inc. 2019). Current CofA. Full instrument panel, radio package incl GN5530W, GPS/ WAAS, GARMIN-VOR/LOC/GS, dual horizons: 1 vacuum/1electric and more (full detail available). Std wing tanks plus Flint Aero wing tip tanks, STC for 100LL or AutoFuel. Horton STOL kit; EDO 2870 Floats, Fluidyne C3200 Wheel/Skiis. Blue/white exterior w/ beige Selkirk fibreglass interior. Good condition. New seat covers, Rosen sun visors, new Davtron battery (2019). ELT, rear baggage door \$149,000 USD. 84-year-old owner selling to buy lighter aircraft. Fred Carmichael fcarmichael@northwestel.net or 867-678-0911 (3682.19443)



motor glider, new Franklin 60 hp, electric start, 1 hr on air frame+engine, Cruises 130mph on 2 gph, full retract. Trailer included. \$33,500. activaeroservice@gmail.com or 705-306-9416 (2639.19397)



RUTAN VARI-EZE 1984. 1,509TTA. "Grand Champion Plans Built", Arlington 1985. Empty wt. 726lbs. MTOW 1,110lbs. Always hangared. 22imp gals. 160kts/12,500'. Repainted 2008, (took 520hrs!) Engine, Continental C-85-12, rebuilt as 0-200. Major O/H Vike Aeromotive, 2012: Titan cylinder assemblies and Sky-Tec starter. 180 hours since. MGL V6 radio and MGL ALT-V 2014. Pointer C4000 ELT. King 76 xpdr. Cleveland 5" wheels and brakes. New brakes, tires & tubes. Two Slick impulse mags. \$22,000. Gordon Hindle: hanne.gordon@shaw.ca or 778-351-1343 (3569.19649)

For a list of common abbreviations used in Classified advertising please see page 40



PA28R-180 Eng. TT 67hrs, Prop 70hrs, 2970 AFTT. Annual Aug 2018, 2 coms MAC1700, 2VOR gs, 4-place headsets. AC completely rebuilt, paint hardcoat, hoses, brakes many extras. Int-10, ext-8 Asking \$60,000CDN OBO Contact: lennypk2@gmail.com or 506-622-0105 (3423.19569)



WILL TRADE FOR CESSNA 172. TTAF 140 hours. Zero-time C 90 rebuilt by Aerotec engines. Rebuilt landing gear. New Cleveland brakes, wheels and tires.Recovered wings. New certified Wag Aero sealed wing struts. New custom exhaust. All new glass. New 406 ELT. New electrical system. Float attachments. All new Randolph paint w/ Ranthane finish. \$79,500 Cdn. Brewer Aviation Contact: jbrewer@eastlink.ca or 902-626-5262. (2564.19653)



R80 22hrs on airframe. 105HP Lycoming O-235 65hrs SMO, 4900hrs TT. Warp Drive 72" 3-blade. Full Lotus 1450 floats. Basic analog VFR and engine guages. Asking \$20,000 OBO. (3679.19234)



1980 BEECHCRAFT A36 BONANZA Continental IO-520-BB; SMOH ~1000 Garmin 750, roll steering, TKS, AFC 200 autopilot, FD, ALT, NAV, Approach, GS mode. VOR, NDB, electric trim, VS, slaved HSI, xpdr ADS-B out. 1 King NAV/Com, insight GEM, stormscope, ICARUS Alt Alert, CFS 1000 fuel mgmt, leather seats. Recent: trim servos, Gyro, tires, LED lights, ELT, gear motor. \$210K USD. Serial: E-1723. BE-36-A36 Reg: C-GOJM. TTSN: ~5400 Seats 6 Toronto. Email: 208evington@gmail.com (3717.19616)

www.csplane.com



1959 PILATUS P3-05 TT SPOH 145 MT PROP HANGERED, 9/10 IN AND OUT 109K USD



1963 180-285 HP P-PONK SM 728 (2000 TBO) SP 108 BIG 3 BLADE, AEROCET 3500'S, WHEELS, WING-X, 169K CDN



TTAF. AIRFRAME O/H'S BY KENMORE 400 HOURS AGO. GMA-340, EDO CALL FOR PRICING.

50 Canadian Singles, Twins and Floatplanes



1953 DHC-2 AIRFRAME O/H 2008 110 SMOH. WIP 6000, ALASKA DOOR, EXT BAGGAGE, TIP TANKS, UPGROSS 5600. 595K CDN



2014 208B EX TT 827 G1000, TKS, 11-SEAT COMMUTER 1.9M USD



SMOH ON IO-550, 50 SPOH, NEW AEROCETS 3400 AMPHIBS, GMA 340, GNS 530W AND 430W.INT/EXT 10/10 395K CAD

STILL THE #1 STOP FOR FRESH WATER FLOATPLANES!!



FEATURED LISTINGS FOR DECEMBER 2019



1969 BEECH B23 Aerobatic Model 1226TT both engine (O-360) and cirtrame KX175 Garmin SL40 KX175 Garmin GPS Trimble 2000 Lowrance 2000 GPS RT359A xpdr. 4-place intercom. Annual done Mar 2019. Located at Muskoka Airport. \$35,000 airmusk@muskoka.com (2242.19413)



2005 RV6A 310 TTSN. Lycoming O-360 (factory new), Hartzel constant speed prop (factory new), 170 kt cruise, electric trim, electric flaps. \$20k paint scheme. Like new. \$100,000 CDN Contact: beauchab@msn.com 705-365-7442 (3386.19437)



CESSNA 172M TURBO DIESEL 135 HP, fuel burn 5 GPH, cruising 115 kts, Cessna 172M 1974, Very low airframe time - 2695.0, Engine - TAE 125-02-99 Diesel aircraft engine, FADEC controlled engine. MT propeller MTV-6-A, Engine time SMOH 651.9 hrs on a TBO 2400.0 hours, Prop time 251.6 hours TTSO. Equipment: KX 155 NAV-COM, Garmin 250XL GPS-COM, Garmin GTX 327 transponder mode C, Audio Panel KING KA 134TSO, 4-place intercom system. All ADs complied with. All maintenance up to date, Canadian AMO. Maintained in CZBB \$85,000 Contact: Ken Smith (604) 991-4300 (3463.18914)



CESSNA A185E 1966 C-FUGX serial# 0991, 3184 TT, Continental IO-520D, 1206 SN, 775 SMOH, 106 O/H. McCauley 2-blade prop, Gami Injectors. All electronic gauges like insight G2 engine monitor, bubble window, 2 bush seats + 1 large back seat. Wipline 3900 floats w/compartments + wheels. Paint 8/10, int. 8/10. Rigorous maintenance all thru the 15 years of ownership. Payload 1212 lbs w/ floats \$155,000 USD. Pierre 514-793-2300 (3710.19463)



1991 WAG-AERO (PA-18) TTSN 960, Lycoming 0-320, 160 HP 406 ELT 2000. Floats, skis, wheels, wing covers. 7 out/8 in \$55,000 OBO (3676.19229)



1969 PIPER AZTEC 250 New panel. Great hauler, stable IFR platform, pleasure to fly. TTSN 5435, 9/12 new or overhauled cylinders 55 hrs ago, props 2010, TSO 409/1058 annual Jul/19. GMA 345 audio, 6-person intercom, G750 and 650, Lynx NGT 9000 ADS-B in/out and active traffic surveillance, ACK 406 ELT, G500TXI with engine monitor and synthetic vision, new powder-coated panel. Original paint and interior. Always hangared. \$150,000. krisqmil@yahoo.ca (2874.19564)



MAULE M4T TT 1570 SMOH 25 STOH (6 NEW Cylinders) Fresh annual. Airframe inspected, repaired, recovered, glass, painted Oct 2018. Icom A-210, Collins VHF-251, King KT76A, Garmin Aera 510, ELT, 26" Alaska Bush Wheels. \$47,000 250-661-4364 or ingibergsson@hotmail.com (3744.19665)



1978 CESSNA 172 XP Sale Partnership, Hangared @ CSU3, IO360 6Cyl 210hp, ~3200TT, ~300SMOH ~20SPOH, IFR, Fuel Injection, CS Garmin avionics, AmeriKing ELT. Recent annual. \$110,000 Cdn. 514-721-1818 or 450-653-3922



FLIGHT DESIGN CT Fall Factory sale has created a very well-equipped version of the CT Super Series (CTSW) 912ULS carbureted from \$135,900 USD. Viisit www.flightdesigncanada.com for more information.



1990 MOONEY M20K/252 718.1 TAF&E time, Prop 1.2 TSMO. Engine in need of crankcase repair, previous damage history. This aircraft was purchased as a project, but no time. \$75KUSD AS IS! Contact: bert@thomasaviation.com or 780-446-7822 (2681 19442)



2016 ZENITH 750 Excellent STOL abilities w/UL 350 IS - 130 HP, ground adjustable prop. Always hangared, Grand Rapids 7" EFIS, Garmin 327 xpdr, and GTR 200 radio, 406ELT, 30 gal. 215 hr TTSN. \$78,000 skyhillsbill@ gmail.com (3725.19440)



1968 PIPER CHEROKEE 235B TTSN 4527 hours, Lycoming O-540 235hp SMOH 1220hrs, CS Hartzell 36" 2-blade prop SPOH 2010 (140hrs). Empty weight 1647 lbs, max gross weight 2900 lbs. Ext 9/10 Int 7/10. Wing tip tanks w/total 84-gal fuel capacity. Dual King radios, Mode C xpdr. 4-place headset intercom. Well cared for and always hangared since bought in 2000. September 2019 annual being completed now. \$85,000 Dave 780-897-0938 or dave@rowltd.com (3700.19434)



AERONCA CHAMP 1946 TT 8324.9 Continental A-65-8FX engine, encoding xpdr, radio, Garmin Aera 500 GPS, good fabric, owner maintenance. Brantford Airport \$20,000 + HST. Email: hogangrn@gmail.com or phone Mike 416-738-5939 (3724.19436)



1948 CESS IA 20 OM 2760 TT, Continenta 0200, Skytec starter Continenta Cleveland wheels & brakes, Scott 3200 tail wheel, wings recovered 2012, new windows and paint. Icom IC-A210, KT76 xpdr & encoder, Sigtronics SPA 400 intercom. Complete logs & manuals, AME owned last 7 yrs. \$27,000 (3053.19299)



1978 CESSNA 340A TTAF 5245, 410 hrs since RAM VII. Props 410 hrs since new in 2013, Vg's, FIKI, spoilers, 183 Gal, factory AC, KFC 200 AP with YD. Useful load 1885 lbs, 275K USD, 250-896-9588 (3720.19620)



1970 CESSNA 180H CAP 3000 FLOATS TTSN 2560 TTSOH 1080. New prop 25, Horton STOL wing ext. LRF, EGT/CHT, COM xpdr, 4-pl intercom, GPS500, ACK 406 EĹT \$135,000 Ph: 705-753-2184 or 705-498-0736 (3733.19541)



R ARCHER II Always hangared; TTSN 1938; SMOH 1938; Navcom Garmin GNC300XL. Narco MK12D VOR/GS. Garmin MX20 MFD. Transponder Garmin GTX327, Kannad 406MHz ELT: \$70.000. (3677.19340)

Canadian Plane Trade Classified Ad Deadline for

January is December 6th Post online anytime at canadianplanetrade.ca

FEATURED LISTINGS FOR DECEMBER 2019



2005 GLASTAR 180 hp Lycoming. 415TTSN. Czech floats. Skis. Cato float prop. Autopilot EFIS TRUTRAK. ModeC xpdr. Garmin 695GPS. 406 ELT. AME maintained. Hangared in winter. \$99,000 Joe 705-720-0235 (3736.19567)



2003 WAG-AERO CUBY Wide body +4 Po, big cargo space, C-90-8F no electric, 3 fuel tanks, TTSN 200 Hr, skis, 1400 floats. Indoor storage. \$35,500 on wheels + skis. \$39,500 on floats. 819-



1967 PA28-180 TTAF 3062, SMOH 953. Always hangared CYYJ. Last annual done July 2019. All AD's up to date, Nav-coms, GPS, VOR, auto pilot, Mode C. \$44,900 USD ono. kfwarner@ shaw.ca

ROTAX.



2010 SUPER DECATHLON 8KCAB 300 TTSN. Mint/like new. NDH. Garmin GTX 330, GMA 345, Aspen EFD 1000, JPI EDM 930, 406 ELT. All log books for US and Canada. \$169,500USD dennispi@gmail.com (3610.19571)

For a list of common abbreviations used in Classified advertising please see page 40

Aircraft Hangar Specialists

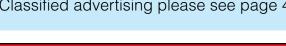
www.spantech.ca





Industrial and Commercial Buildings also available dmorris@spantech.ca 1-800-561-2200 Proudly Made in Canada Design Build and T-Hangars available

DUNDAS, ONTARIO | 905-627-1127 Fax: 905-627-7339



website: https://RotechMotor.ca



email: sales@Rotech.ca

YEAR-END ENGINE SPECIAL: FREE shipping and freight insurance for all engine orders

completed between Nov 7, 2019 and Dec 20, 2019.



See ROTECHMOTOR.CA for ENGINE SPECIALS

Contact our Network of Dealers (see 'Canadian Repair Centers' on our website) or Call Us at 236-600-0137



Serving the aviation community for 55 years Certified AMO 335-92

Specializing in fabric work, structural repairs and rebuilds

- · Certified engine overhaul and repair
 - Parts and accessories
 - · American IA on staff for all American aircraft
 - Certified or Homebuilt

905-335-6759 ckovachik@spectrumairways.con

Buyers are encouraged to check with original manufacturers to ensure structural and airworthiness requirements are met.



IFR - IATRA - ATPL **Intensive Ground School**

- Three-day preparation for Transport Canada exams
- Montreal area

Seminair inc. markperron@sympatico.ca 514-923-6275



40'x12' \$6.500.00 + TAX

Other sizes available

Includes:

Single Lever Lock, Mounting Hardware, **Electric Operator, Fully Wired/Assembled**

Delivery to any site in North America

Request a FREE Quote (855) 725.7600 www.**DiamondDoors**.com

Need healthcare but can't afford to fly there?





FOR SALE OR TRADE

CESSNA SEAPLANES AND CESSNA LANDPLANES

For listings, please visit our web site

www.boisvertaviation.ca

SERVICING, BUYING, SELLING, TRADING SEAPLANES SINCE 1979

MONTREAL'S ONLY SEAPLANE BASE CSA4

BOISVERT & FILS AVIATION LTEE

8295 BOUL. GOUIN EST MONTRÉAL, PQ, H1E 2P6

Tel.: 514-648-1856 Fax: 514-648-9309

AVIATION ABBREVIATIONS

The following are common abbreviations used in Canadian Plane Trade classified advertising. When counting an ad for insertion charges, each abbreviation is one word. When more than one abbreviation is shown, first given is preferred.

MB See 3LMB

..... air condition A/C aircraft AD..... Airworthiness Directive ADE automatic direction finder A&E airframe & engine alc..... alcohol (as in alc. prop) AP..... auto(matic) pilot ATS..... automatic throttle system ASI airspeed indicator 360CH 360 channel radio 720CH 720 channel radio CG. centre of gravity CHT. cylinder head temperature Comm/com communications Cont Continental (engine) CS..... constant speed propeller DG directional gyro DME distance measuring equipment EGT..... exhaust gas temperature ELT emergency locator transmitter Enc Alt . . . encoding altimeter FBO..... fixed base operation . fliaht director FREMAN. FREM.... factory remanufacture GEM graphic engine monitoring GPH gallons per hour GR glide ratio GS..... Glideslope HP..... horsepower HSI horizontal situation indicator IFR instrument flight rules ... instrument landing system 3LMB/MB... 3 light marker beacon

LOC..... localizer

LRF..... long range fuel (capacity)

Lyc Lycoming (engine)

MK Mark (model of equipment) MPH miles per hour NAV navigation NAV/COM.. navigation/communications NDB non-directional beacon NDH no damage history OAT..... outside air temperature or best offer 0/0xv oxvaen Pratt & Whitney (engine) P&W RMI radio magnetic indicator RNAV area navigation SCTOH since chrome top overhaul SCMOH ... since chrome major overhaul SFREMAN/ SFRM. . . . since factory remanufacture SMOH.... since major overhaul SPOH since prop overhaul STC..... supplemental type certificate since top overhaul STOH STOL short take off & landing T&R turn & hank TBI turn & hank indicator TBO time between overhauls TT total time TTAE or TTE total time aircraft engine TTA total time aircraft frame TTSN total time since new VFR..... visual flight rules very high frequency VOR ... very high frequency Omni-Range

xndr transponder



COPA CARES

...about the future of General Aviation in Canada

Join and Support Canada's largest association of pilots and aircraft owners



For FREE information please write:

Canadian Owners and Pilots Association 75Albert St., Suite 903 Ottawa, ON, K1P 5E7

> Tel.: 613-236-4901 Web site: www.copanational.org





Chosen for value and service

35% to 85% off list price!

New surplus Piston, Turboprop and Jet parts as well as parts for Single and Twin Cessnas, Citations, Pipers, and more! If there's a part you need, there's a good chance that we have it!

eck with us for Parts

- Airframe New parts for most light singles to coporate and commuter aircraft, including ag, warbirds and experimental. Cessna twins are our specialty. Also parts for many others in general aviation.
- Engine 50% discount on most new Continental and Lycoming parts in stock, and a growing inventory of P&W and Allison turbine and jet engine parts.
- Propellers & Blades McCauley, Hartzell, Hamilton Standard. www.preferredairparts.com/props.htm
- Accessories & Parts 100's of new, and OHC accessories. Check with us for all accessory parts!
- Hardware 12,000+ part numbers, 40% discount!
- Consumables Spark plugs, ignighters, air and fluid, brake lining, and more.
- Wheels, Brakes & Parts for all makes, including tailwheel.
- Lighting Strobes, beacons, bulbs, lenses, parts for all makes. 10,000 GE bulbs @ 85% off!

www.preferredairparts.com

Free Inventory Search!

We Bury Worldwide

We buy inventories of new surplus parts for nearly anything that flies. Also tired or damaged Cessna twins, Caravans, Citations, engines and propellers.

Gene Hembree is our buyer. Please contact him at 330-698-0280 ext.224 gene@preferredairparts.com



Buyers are encouraged to check with original manufacturers to ensure structural and airworthiness requirements are met.

AvGas & JetA Cardlock



Canadian Plane

Trade

Classified Print Ad Deadline for January is Dec 6th Post online anytime at canadianplanetrade.ca

Div. of JILCO Industries, Inc Contact us:

Preferred Airparts, LLC

800-433-0814

Toll free, U.S. & Canada Tel. 330-698-0280

Fax. 330-698-3164

sales2@preferredairparts.com

Sales Hours 8:15am to 5:30pm EST

Specializing In Fibreglass **Aircraft Parts**

For Most Cessna Single Engine Airplanes

selkirkav@selkirk-aviation.com www.selkirk-aviation.com (208) 664-9589

- Products FAA Approved
- Interior Panels

We are

<u>Cash</u>

Buyers!

- Glare Shields
- Nose Bowls
- Extended Baggage Kits
- Composite Cowlings for All Cessna 180 and 185 and Years 1956 to 1961 **Cessna 182 Aircraft Models**
- Vinyl & Wool Headliners
- Soundproofing Kits Available
- Carbon Fiber Cowlings on Field **Approval Basis Available for PA18 Cub**

HELPING YOUR BODY TO HEAL ITSELF!

- *Sickness & Disease can NOT live in an alkaline body
 - * Your Energy will soar!
 - * Aches & Pains vanish
 - * More Clarity
 - * Best Natural Hangover Remedy too



CALL TOLL FREE 1-877-682-1188

order online at www.suedehills.com

"You will be amazed at how good you can feel!"

INDEX

215 Aircraft Wanted

220 Antique A/C

& Parts

224 Collectibles

225 Aviation Art

Services

230 Avionics for Sale

235 Avionics Wanted

Opportunities

226 Aviation

240 Balloons

Manuals

250 Blocktime

255 Business

260 Computers

261 Destinations

265 Employment

Wanted

270 Engines for

275 Engines Wanted

Simulators

285 Floats for Sale

290 Floats Wanted

295 Fly-In Resorts

300 Hangar Space

305 Help Wanted

310 Flight Instruction

315 Leasing/Rentals

320 Legal Services

325 Miscellaneous

330 Noticeboard

335 Parachutes

340 Parts for Sale

345 Parts Wanted

Parachutes

350 Professional

Services

355 Propellers for

Sale

360 Propellers

Wanted

365 Real Estate

368 Sailplanes

Partner

375 Skis for Sale

380 Skis Wanted

385 Tiedowns

395 Title Search

400 Trade or Sale

405 Travel Information

390 Thefts

370 Share or

346 Powered

327 Maps

Sale

280 Flight

245 Books/

005 Aero Commander 010 Aeronca

015 Aerospatiale 020 Amphibian 025 Beech 030 Bellanca

035 Britten-Norman 040 Cessna 045 Citabria 046 Cirrus

047 Commander 048 Commonwealth 050 de Havilland 055 Diamond

060 Ercoupe 065 Fairchild 066 Financing 070 Fleet 075 Floatplane

077 Found 078 Helio Courier 079 Generators 080 Grumman

085 Gyroplane 090 Helicopter 095 Highlander 100 Homebuilt

105 Lake 110 Luscombe 115 Maule

120 Mooney 125 Murphy 130 Navion 135 Piper

140 Pitts 145 Rallve 150 Rockwell 152 Scout

155 Seabee 160 Starduster Too 165 Stearman 170 Stinson

175 Swift 177 Lost or Stolen 180 Taylorcraft 185 Ultralight

190 Warbird 195 Aerial Photography/ Advertising

200 Aerial Touring 203 Aerobatic Training

205 Aircraft Ferrying 210 Aircraft Painting 212 Aircraft Covers 213 Aircraft Storage 410 FBO 214 Aircraft for Sale 500 Passsages

025 - BEECH

1976 BARON B58 10,790 TT, LE: 401 hrs, RE: 961 hrs. Props 2012 - 245 hrs each. Fully IFR, 430W, Flightstream 210, GPSS steering. \$135,000USD blfrench59@gmail.com for info and videos of aircraft flying, pics or text 780-607-2686 (3704.19439)

030 - BELLANCA

1971 BELLANCA 17-30A VIKING serial number 30399. Aircraft will require some TLC. Pls contact for details centralinteriorbailiffs@shaw.ca or 866-729-2424 (3706.19445)

040 - CESSNA

1976 CESSNA 182P SIDS completed, engine 0 TSOH, new VFR avionics, new autopilot, new paint, CofA April 2020. Beautifully restored Cessna 182P for sale. ADS-B out. Brand new engine OH. More Details: www.uppervalleyaviation. com. Ph: 604-991-4300 (3579.19623)

040 - CESSNA

1961 CESSNA 182D 7465 TTSN 1924 SMOH Horton stall kit. New fuel bladders and much more. Major annual just finished. Email for info pkg. Shayne 250-688-1760 smporath@gmail.com (2570.19524)

1975 CESSNA 172M-SKYHAWK Have logs. Needs undated inspections. Aircraft will require sent T.C. (3706.19358)

1974 CESSNA 172-M IFR w/Garman 430 Wass, SIDDS inspection done. 0 time Ram 160 hp. conversion. New paint, leather interior, and glass We can look at trades and/or financing. For details: www.uppervalleyaviation. com. Contact: Ken salesuva@telus.net or 604-991-4300 (3579.19624)

CESSNA A150L/150HP AEROBAT 2200 SMOH. Puns great, all comps 75/80 or beier. Repeat annual. \$25,000 (3702.19343)

060 -- ERCOUPE

ERCOUPE 415-CD 1946 metal wing Ercoupe w/rudder pedals. Nav/ landing lights, hat shelf, Cleveland brakes. New MC, reservoir, tubes, tires, and Concorde battery. \$22,000 Contact: dswhidden@gmail.com or 250-859-2532 (3728.19465)

100 - HOMEBUILT



PARTIALLY COMPLETED RV7 Empenage and wing kits, located at CYKF. \$6500USD but open to negotiation. I will cover crating for shipping, you pay the freight costs. Additional photos/videos available on request. Contact: rraw@rogers.com or 519-654-3256 (2896,19468)



CH750 GEN 3 Wings, flaperons, slats, rudder and horizontal stabilizer. Wings, horizontal stabilizer and rudder completed to preclosing stage. Wings have dual 12 gal fuel tanks installed along with heated Dynon pitot and remote mounted ADHARS and OAT probe along with position and landing/ lights. All wiring completed Tefzel aircraft wire. Includes complete build plans and DVD set. \$16,500 780-519-0857 (3390.19629)

KITFOX PROJECT Ready for test flight. BMW R100 engine planetary drive and Princetip propellor. Good winter project. Estate sale. \$19k. Must be seen. cbcherring@gmail.com or 819-674-1646 (3332, 19396)

100 - HOMEBUILT

VANS RV-4 KIT *Reduced* Partially RV-4 kit (empennage, wing, built fuselage). Wings (minus flaps and and ailerons) by Phlogiston. Work supervised by structures AME. Does not include finishing kit. Numerous available. \$10,000 USD mghiscok@hotmail.com

PA 18 REPLICA All major components near completion. Wide body heavy duty airframe w/float fittings. O-320 engine w/fresh bottom end. Most small parts and supplies to finish included. \$39,000 PH: 204-641-0902 (3688.19543)



CH 750 PARTIALLY ASSEMBLED Fully assembled tail section ready for inspection. Complete set of wings, one partially complete. Long range fuel tanks. Full plans for entire plane, hand tools, clecos, rivets, assembly videos. \$13.000obo 705-561-3675 or shortbooeyes@hotmail.com (3743.19654)

110 - LUSCOMBE

LOW TIME LUSCOMBE 8F AF 1440. Engine 858.7, Prop 470. New 406 ELT. BAS 4-point harness, retractable tail handle, VHF. Xpdr w/blind encoder, rebuilt altimeter, electric start. Wheel pants, skiis. Grove brakes. \$25,000usd 306-850-6158 or davel9@sasktel.net (3723.19435)

135 - PIPER

24-180 COMANCHE 2135. Engine SMOH-628, corrosion inspection completed. Prop TTSN 628, inspection Aug 2018. Aussie horn installed. 406 ELT, 4-place intercom, KY-97A, Bendix-J12B KX170-B ADF. VOR, EGT. Google cf-ndg for photos. Always hangared. \$69k-CDN drmac8807@gmail.com (3686.19455)

1977 PA-28R-201T 2642 TT, 950 SMOH w/fresh teardown, IFR, Garman gear, STEC auto pilot. New prop. Newer paint and interior. \$139,900. More details - www.uppervalleyaviation. com. Ken Smith 604-991-4300 or email: salesuva@telus.net. (3579.19622)

1961 PIPER PA22 COLT Owner TT7869, SMOH1752, Maintenance. STOH312 New fabric. headliner. windshield, battery, fuel valve. Refurb attitude indicator, turn coord. GPSMAP 196, intercom, Mode C, VHF. Compressions 77+. Make great floatplane. \$25,000obo. Dan 709-689-5521 (3727.19464)

FULLY RESTORED 1953 PA-22/20 Certified Aircraft. Upgraded engine. TTSN 1728.9, engine TSOH, 304.6 prop 1728. Artex 406 ELT, Bendix King KY 97A com, KT 76 Mode C xpdr. Fresh annual. Includes floats, skis. \$59,000 250-570-7663 (3741.19615)

226 – AVIATION SERVICES

AEROPLANE FABRIC REPAIRS Repair or replace, our staff have over 40 yrs experience working on certified and owner-built, fabric covered aircraft. Recent photos of work quality available on request. Brewer Aviation Contact: jbrewer@eastlink.ca or 902-626-5262. (2564, 19652)

230 - AVIONICS FOR SALE



HYBRID CELLULAR & SATELLITE AIRCRAFT TRACKING! Affordable high rate GPS tracking. Advanced 2-way messaging. Accurate flight time reports. EFB, manifest, & custom form. External sensor inputs. Book in for a free trial at www.v2track.com (2481.19447)

270 - ENGINES FOR SALE



C-85 CONTINENTAL ENGINE 1,050 SMOH. 200 STOH. Cylinders averaged 75/80 psi (cold). Pull electric start. Overhauled (95%) tagged prop from McCauley. Full exhaust systems. Engine/ prop logs up-to-date, carburtor rebuilt. 1 spare cylinder included. \$14,500 Contact: activaeroservice@gmail.com or 705-306-9416

285 - FLOATS FOR SALE

NEW 2000 & 2250 FLOATS ANY RIGGING for homebuilt & O M aircraft. Also several sets of damaged Edo & PK floats for parts or rebuild. Ed Peck 902-467-3333.

EDO 2960 FLOATS Were on a C-185, tight, pretty good shape. \$12,500CAD. Pork chop also available for \$950CAD. andre@tourangeaumechanical.ca or 613-229-7341 (3608, 19334)

AMPHIB FLOATS ED 2790 w/struts, spreader bars, punp, ur/down-lights, cross wires, rivides. Bottoms smooth-(2290.19361)

FLOAT BRACE WIRES Tie Rods Most popular lengths in stock new certified new surplus and some used wires. Ed Peck 902-467-3333 or sales@ peckaero.com

Post online anytime at canadianplanetrade.ca or e-mail admin@copaflight.ca for assistance

285 – FLOATS FOR SALE

CERTIFIED FORWARD SKINS for most Edo Float. Ed Peck 902-467-3333 fax 902-467-3136 or sales@peckaero.com (2350,18424)



EDO 3430 FLOATS FOR CESSNA 206 Very good condition, no dock patches. rash ٥r Complete removed from aircraft. Complete U\$14,000 Ken Wilson, 647-227-6996, kenwilsonac@gmail.com (586.19307)

300 - HANGAR SPACE

HANGAR SPACE FOR RENT South side Kamloops Airport. 42 x 35, insulated, power and radiant heat. Excellent access to new seaplane ramp. 250-320-9760 (3699,19523)

TWO HANGARS FOR SALE Each hangar 44 feet by 60 cm. Cannonball track doors tea Calgary. To be disassembled removed from removed from property. Best offer. (2942.19304)

BRAMPTON OPEN T-HANGAR End unit #518. Excellent entry level protection. Faces east. Minimal sun, very sheltered, 39'+x15'x12'+. High entry 15'x12' shed. Potential for future improvements at a fraction of new cost. 30-yr owner. David 905-846-1851 (3729.19467)

HANGAR SPACE FOR LEASE up to 10,000 ft² Waterloo (YKF). Heat, light, power. Will price per ft2 required. Shop and office space. Door Contact: 888-328-6459. 80'X19.5'. bill ie@rotorservices.com or Great Lakes Heli 519-650-4542 (3731.19525)

HANGAR 40' X 65' Two 38' electric doors opening on to paved taxiways at Owen Sound Billy Bishop Airport \$120,000. Owner will consider reduced price in exchange for rent of 1/2 of hangar. Contact: gord@thedampub.ca or 519-538-2868 (2355.19526)



VICTORIAT-HANGAR FOR SALE Unit 17 at Victoria T-Hangars Inc. 1663 Mills Rd. Sidney BC. 40' x 35' T w/15' ceiling. 12' doors. 100 amp service. Asking \$110,000 Email: larry.beaudry@hotmail. (3469.19544)

For a list of common abbreviations used in Classified advertising please see page 40

325 - MISCELLANEOUS



AIRCRAFTTUG Rebuilt carb, alternator and brakes. New battery and fuel pump. Runs well. \$3500. call Terry @250-802-9023 or email xnwtpilot@hotmail.com

(3053.19444)

340 - PARTS FOR SALE

MGK AERO: Airframe parts from spinner to tailwheel for many singles. Large stock of engines and parts, propellers, avionics, undercarriage, instruments, excellent control surfaces. Parting 1976 C185. Call re: project planes. For Sale: Beautiful 1967 235 Cherokee, low times, fresh annual. 204-324-6088 (2576,19650)

TWO **ENGINE** CONTROLS QUADRANTS One DHC-2 Beaver and one DHC-3 Otter. Completely overhauled and in like new condition. \$2000 each. Ph: 709-677-2237 (3737.19570)

AEROFAIRINGS

450+ new aircraft exterior Vinylester fairings available on the WEB at: www.aerofairings.ca 819-375-1250 Ask for a quote by email at:

SLICK MAGNETO MODEL 4370 288 hrs since overhaul. Reliable magneto was removed from IO360 engine after replacement with electronic ignition. \$400. (403)710-2093.

info@aerofairings.ca

350 - PROFESSIONAL SERVICES

SAFETY PILOT/COACH Enjoy safe, practical real world flying in the GA system. Experienced pilot to ride R seat with you. IFR practice, cross country practice or Travel, cross border and large airport operations. Southern Ont. departures. Safely gain confidence, experience and knowledge on your schedule. Dave Commercial, Fisher. instrument. seaplane with over 4000 cross country hours in the GA system. FERRY SERVICE, 416-578-1303. SERVICE, 416-578-1303, fishayr@gmail.com (2830.18949)

365 - REAL ESTATE



ONTARIO RUNWAY LOTS Four 1-acre lots adjacent to 2000' paved private runway. Own your portion of runway. Build your own hangar and cabin. Next to Kennebec Lake near Arden. \$39,900. Financing available. Email: seanmarshall@ygkventures.ca(3734.19545)

365 – REAL ESTATE



AVIATOR ALERT! Charming remote cottage in a pristine wilderness setting north of Sudbury. \$250,000. Fishing & hunting & relaxation par excellence. Call 905-714-2473 or visit www.tranquilitybaylodge.com (2392.19628)



NATURE LOVER'S PARADISE! 4-bed. 3-bath home on 88 acres w/pond, trout stream, 4km walking trails. 2 runways (1800' N/S + 1360' E/W), 27.5'x38' hangar w/10' bifold door. Shop, garages, studio/office, indoor swim spa. Back-up generator powers the whole property. 9 km N of Cobourg, 99 km E of Young and Hwy 401. Fly right up to the front door. MLS Asking, \$1,680,000. Call Michael J. Perry Owner/Broker Record, RE/MAX Lakeshore Realty Inc. Brokerage 905-373-7653 or remax@eagle.ca (3684.19462)



HANGAR. AND HOME. AIRPORT FOR SALE This Estate Home has a 4200 square foot heated hangar, a 4500 foot paved runway, and a 5300 square foot home with an indoor pool and hot tub. This is a private airport registered with Nav Canada, it sits on 160 acres, and it is located south of Calgary Alberta. For additional details please call (403) 689-1548 or e-mail tom@donerightrealty.ca (3337.19312)



UNDER THE BIG ALBERTA SKY Home for Sale in Okotoks a 1 minute walk to the Okotoks Air Ranch Airport. 3 bedroom, 2.5 bath, 4-car garage. O'Neill, ReMax Southern Realty, joyceon@shaw.ca or 403-998-

370 – SHARE OR PARTNER



1/4 SHARE 1981 M20J MOONEY Always hangared. 2175TTSN, 1150 SMOH. King K-197 comms; Kx-155 Nav, KT-76C xpdr; KR-87 ADF, KNS-80 RNAV coupled to HSI; KFC-200 AP/ FD w/alt hold; DME; dual VOR; Garmin 150XL GPS; Garmin 696 GPS; JPI-FS 450 fuel flow; Insight GEM, GAMI injectors, 406 ELT; electric gear, trim, flaps. Based at CYKZ. \$27,000CDN Contact: Steve, drsflew@sympatico.ca or 647-554-2001 (3698.19424)



SHARE FRACTIONAL OWNERSHIP of well maintained IFR, 1972 PIPER NAVAJO. Wing lockers, G430, Oxygen, 6-place intercom, full deice, recent paint/interior, low time engines, 0 time props. \$40,000 CDN. For details call Anthony 604-710-1501 (3701 19430)

375 – SKIS FOR SALE

WHEEL SKIS De Marque Airglass avec Teflon Capacité de 3600 lb. \$4600 Cell: 514-820-6480

FEDERAL RETRACTABLE SKIS 1500AWD w/teflon bottoms. Fits early Citabria and all Aeroncas. Complete kit. \$7500 obo. PH: 819-336-4181 after 6pm ET.

SKIS FOR CESSNA 172 Front and main gear skis, no bungees or wires, no paperwork. \$1500 obo. 705-313-4581 or jlfish1961@hotmail.com (3132.19568)



Flight CORPORATE Members

10g AEROSPORTS/MKT **AEROBATICS**

519-873-0327 www.10gaerosports.com Airshows featuring high performance aerobatics

2049174 ALBERTA LTD

7505 40TH STREET SE CALGARY AB T2C 2H5 imorozov@geogrout.com

536009 YUKON INC

200 - 204 LAMBERT ST WHITEHORSE YT Y1A 3T2

ABBOTSFORD AIRPORT

30440 LIBERATOR AVE ABBOTSFORD, BC, V2T 6H5 (780)447-5955 https://www.abbotsfordairport.ca

ACORN WELDING / SEAPLANES WEST

10916 - 119 ST EDMONTON, AB, T5H 3P4 (780)447-5955 https://www.acornwelding.com One stop shop for aircraft exhaust & engine mounts.

ADVENTIST WORLD AVIATION

1281 HWY 33 EAST KELOWNA BC V1P 1M1 778-753-6564

www.flyawa.org

AWA mission flights support isolated communities, with medical evacuations, medical outreach (vaccinations/clinics), dental outreach, health programs and Christian Ministries (church planting, bible studies).

AÉROPORT DE SHERBROOKE

900 CHEMIN DE L'AÉROPORT COOKSHIRE-EATON QC J0B 1M0 819-212-7728

www.aeroportdesherbrooke.com Ravitaillement (100LL Jet A1), Tie-down, Restaurant sur place, Pas de frais d'atterrissage.

AIR-DALE FISHING & HUNTING

(800) 263-2546 www.algomacountry.com/partners/air-

dale-fishing-hunting Fishing and hunting drive-in lodge and fly-in outpost camps located in the Algoma region near Wawa, ON.

ALBERTA AERIAL APPLICATORS ASSOCIATION

P.O. BOX 21064

EDMONTON, AB, T6R 2V4

www.albertaaerialapplicators.com The Alberta Aerial Applicators Association (AAAA) is a non-profit society founded on November 8, 1971 by a group of dedicated aerial applicators. The initial goal of AAAA was to provide a unified voice for aerial application industry in Alberta and promote the advancement & improvement of the industry.

ATC QUALITY ENGINE OVERHAUL 6406 BLUEBIRD ST ORILLIA ON

L3V 6H6

(705)325-5515

Engine overhaul/repair, non-destructive testing, dynamic balancing, engine modifications, dynamometer testing.

A.V. ROE CANADA AVIATION MUSEUM ASSOCIATION

Unit 20 - 229 AVRO LANE SPRINGBANK AIR, CALGARY AB T3Z 3S5

403-279-7791

info@avromuseum.com

www.avromuseum.com

Public viewings on the second Sunday of each month: 12pm to 3pm

BEL-AIR LAURENTIEN AVIATION INC. 1341 CHEMIN DE LA VIGILANCE C.P.2009 SHAWINIGAN QC

G0X 1L0 819-538-8623

www.belairaviation.com

Maintenance aéronefs pistons, distributeur, pièces Cessna, réparations structurales distributeur flotteurs aerocet, wing extensions distributeur, essence 100ll, restauration, aérodrome lac-à-la-tortue

BIG LAKES COUNTY

BOX 239 HIGH PRAIRIE AB TOG 1E0 780-523-5955 biglakescountv.ca

BOISVERT & FILS AVIATION LTD 8295 GOUIN BLVD E

MONTREAL QC H1E 2P6 (514) 648-1856

The only seaplane base on Montreal Island, providing seaplane maintenance, aviation oil and avgas.

BRAMPTON FLYING CLUB

PO BOX 27 STN CHELTENHAM ON L7C 3L7 (905)838-1400

www.flybrampton.com Flight school, flight college, Cessna pilot centre, aircraft maintenance, Cessna aircraft and parts sales, Humphrey's pilot shop, fuel sales.

BRIGGS TRUCKING & EQUIPMENT LTD 11350 2 ST NW

EDMONTON AB T6S 1G2 Heavy equipment hauling and rental.

BURLINGTON FLYING CLUB 2446 WOBURN CRES

OAKVILLE ON L6L 5E9

CANADIAN AIRWAYS LTD.

50 BUCCIARELLI DR PO BOX 1150 CHAPLEAU, ON, P0M 1K0 (705)864-0442

www.canadian-airways.com Aerial photography, sightseeing flights, day fishing & canoe trips, aerial survey, mining & forest exploration, search & rescue.

CANADIAN BUSHPLANE HERITAGE CENTRE

50 PIM STREET SAULT STE MARIE ON P6A 3G4 705-945-6242

www.bushplane.com

The CBHC preserves and presents exhibits, artifacts and educational programs about Bush Planes, Bush Flying and Forest Protection.

CANADIAN HARVARD AIRCRAFT ASSOCIATION

TILLSONBURG, ON, N4G 4H5 (519)842-9922

www.harvards.com

Demonstration, restoration and maintenance of Harvard aircraft. Formation displays for air shows, memorial and special occasions.

CANADIAN PROPELLER LTD

462 BROOKLYN ST WINNIPEG MB R3J 1M7 (204)832-8679

Canadian Propeller Ltd., provides aircraft propeller, governor +NDT services. We are an authorized Hartzell & McCaulev service centre.

CBR TECHNOLOGY INC

92 LAKE CRIMSON CLOSE SE CALGARY AB T2J 3K7 (403)285-6432

www.cbrtech.ca

Remote airfield services include - Runway firmness testing, Survey of threshold, runway profile, & obstacles, Full to partial AWOS installation & servicing, Dual Aircraft Altimeter & on-site personnel Certification, Industry Canada Licensing for personnel & base stations, Flight Check Instrument Procedures.

CDN AVIATION INC.

4631 RUE GARNIER MONTREAL QC H2J 3SJ 1-800-980-9430

www.cdnaviation.com Assist aircraft owners to ferry their aircraft from one place to another in North America.

CIVIL AIR SEARCH AND RESCUE ASSOCIATION (CASARA)

PO Box 183 Winnipeg STN. Westwin MPO Winnipeg MB R3J 3Y5 204-953-2290

www.casara.ca

We are a Canada-wide volunteer non-profit aviation association dedicated to the promotion of Search and Rescue awareness and to the provision of trained and effective air search support services to supplement our National Search and Rescue program. CASARA operates in all 13 provinces and territories. Search and rescue responsibilities in each of these Member Organizations is broken down into Zones.

ckmm photographic 24 FLECHER DRIVE

BRAMPTON, ON L6Y2G6 778-889-5022

www.ckmmphotographic.ca

ckmm photographic is a certified drone/ RPAS operator in Canada, performing photography, videography and mapping services. We also provide a full production capability for our clients, ranging from creative/planning/scouting to fully produced video and still images.Located in the GTA, we serve clients throughout Canada

CNC4-GUELPH AIRPARK INC 50 SKYWAY DR

GUELPH ON N1H 6H8 519-716-0521 Fuel 100LL Cardlock System 24/7. Runway (14-32) 25 ft long with lights dusk to dawn.

COAST CAPITAL SAVINGS

Runway (05-23) 2100ft.

800-9900 KING GEORGE BLVD SURREY, BC V3T 0K7 1-844-945-1461 www.coastcapitalsavings.com

psamimi@travelersfinancial.com We finance certified new or used aircraft, including single or multiple engine, turbine or piston, fixed or rotary winged aircraft

COMBINE WORLD INC.

PO BOX 357 ALLAN SK SOK OCO 1-306-221-3800 combineworld.com

Combine World Is A Diverse Company, Specializing In The Sale Of Used Agriculture & Construction Equipment.

COMMERCIAL FUNDING GROUP INC.

16 - 120 WESTBEAVER CREEK RD RICHMOND HILL, ON L4B 1L2 866 703-6707

Commercial Funding Group Inc. specializing in commercial and business use aircrafts/engines for Canadian based companies ranging from \$100,000 -\$2,000,000. Contact Michael Maurer.

DE LAGE LANDEN FINANCIAL SERVICES CANADA INC. (DLL)

3450 SUPERIOR COURT, UNIT 1 OAKVILLE, ON L6L 0C4 (905)399-7125

paul.green@dllgroup.com

Partnership to us means seeing what really counts. We see more than a customer, and work harder as a partner, to help get the right tools into the right hands.

DEMA LAND SERVICES INC

10-320 CIRCLE DR ST. ALBERT, AB T8N 7L5 780-458-7123

www.demaland.ca

Everything is built on real estate. A reliable foundation comes from experience that matters

DEVENIR PILOTS GBSN S.E.C.

182 TETREAULT MONT-SAINT-GREGOIRE QC J0J 1KO

514-502-0499 www.devenirpilote.com Airplane shares available at a fraction of the

cost. Professional aviation administration of your asset

DORVAL AVIATION INC

202-9025 RYAN AVE DORVAL QC H9P 1A2

(514)633-7186

Dorval Aviation is a flight training centre offering the full curriculum of training from private to commercial including multi, instrument and float ratings.

EAGLE AIRCRAFT INC.

HANGAR 3, TAXIWAY C SEGUIN PARRY SOUND AREA MUNICIPAL AIRPORT ON P2A 2W8 705-378-4728

http://www.eagleaircraftinc.com/ Bases at Toronto Island CYTZ and Parry Sound CNK4. Piston. turbine. fixed. rotary wing and float aircraft maintenance. Garmin Distributor and Service Centre. Avionics and structures.

EXECUCOR FINANCIAL LIMITED

CORPORATE HEAD OFFICE 2 DIRECTOR COURT, SUITE # 102 WOODBRIDGE, ONTARIO L4L 3Z5 (613)325-9713

belangerm130@gmail.com Financial solutions for the long haul!

FAIRMONT HOT SPRINGS AIRPORT

5225 FAIRMONT RESORT RD FAIRMONT HOT SPRING BC V0B 1L1 250-345-2121

www.fairmonthotspringsairport.com Full aviation and fueling services for aircraft up to and including 737's, 24/7. 6000x100 asphalt runway CYCZ

FLIGHT FUELS INC

3515 76 AVE EDMONTON AB T6B 2S8 (800)607-4355 Distributer of aviation fuels and lubricants.

Flight CORPORATE Members

GLOBAL STAR CANADA SATELLITE CO

115 MATHESON BLVD WEST, SUITE 100 MISSISSAUGA, ON L5R 3L1

905-890-1377

Globalstar is a leading provider of mobile satellite voice and data services. Customers across Canada and the world rely on Globalstar and SPOT for emergency and redundancy communications, access to emergency personnel and to manage valued assets even when cellular services are unavailable.

HAMMOND AVIATION LIMITED 11-4881 FOUNTAIN STREET N. WATERLOO INTERNATIONAL **AIRPORT** BRESLAU ON NOB 1M0

1-888-256-1106

www.hammondaviation.com Hammond Aviation Ltd. - Is an exclusive wholesale and retail distributor for a wide variety of quality aviation products servicing Flight Schools, Pilot Shops and pilots directly.

HIGHLANDS FLYING CLUB 68 CREIGNISH MOUNTAIN ROAD CREIGNISH, NS B9A 1B5 (902) 625-0506

The Highlands Flying Club is a group of five pilot-owners. The club has been in existence with a number of different members and several airplanes for over 30 years.

IMPEL TRANSPORT LTD

PO BOX 895

WINKLER MB R6W 4A9 204-331-9313

www.impeltransport.com

INDIANA PAGING NETWORK, INC

6745 WEST JOHNSON ROAD LAPORTE, IN, US 46350 219-608-1458

www.indianapaging.com Provider of international border crossing software app called "Easy eAPIS" "www. easyeapis.com

KELLY PANTELUK CONSTRUCTION LTD

PO BOX 190 ESTEVAN SK S4A 2A3 (306)634-2166

KINDERSLEY PLANE OWNERS INC PO BOX 1555

KINDERSLEY SK S0L 1S0.

MAGNES GROUP INC

7030 WOODBINE AVE, SUITE 801 MARKHAM ON L3R 6G2 (888)772-4672

www.magnesgroup.com Providing value and protection to Canadian aircraft owners, pilots, operators and manufacturers for over 50 years

MAXCRAFT AVIONICS LTD

250 - 18799 AIRPORT WAY PITT MEADOWS BC V3Y 2B4 604-465-3080 FXT 221

Maxcraft Avionics Ltd. provides professional avionics services to all types of private and commercial aircraft including helicopters and fixed wing aircraft.

MCMILLAN LLP. LAWYERS/AVOCATS BROOKFIELD PLACE, 181 BAY

STREET SUITE 4400 TORONTO ON M5J 2T3 416-307-4005

www.mcmillan.ca

A national, full-service law firm located in Vancouver, Calgary, Toronto, Ottawa, Montreal and Hong Kong with a dedicated Aviation Law Department

MISSION AVIATION FELLOWSHIP OF CANADA

264 WOODLAWN RD. W GUELPH ON N1H 1B6 877-351-9344

www.mafcanada.ca

MAF is an international. Christian, humanitarian organization working to meet the transportation and communications needs of those living and serving in the poorest and most remote parts of the world. Best known for aviation, Mission Aviation Fellowship (MAF) pilots and mechanics operate and maintain a fleet of over 145 aircraft - flying in and out of some 2500 airstrips in more than 30 countries around the world.

NEAR NORTH AVIATION

www.nearnorthaviation.com info@nearnorthaviation.com PARRY SOUND LOCATION 97 AIRPORT ROAD SEGUIN. ON P2A2W8 (705)378-0981 HAMILTON LOCATION 520-9300 Airport Rd MT. HOPE ON LOR1W0 (905)679-5577

We are a flight school located in Parry Sound and Hamilton international. We conduct training for PPL, Instrument, Multi, and night

OCTANT AVIATION

4501 RUE BISHOP, BUREAU 202 LONGUEUIL QC J3Y 9E1 (450) 678-4884

www.octantaviation.ca

Experts en solutions pour l'aviation/ Experts in aviation solutions.

OGL ENGINEERING

1723 - 27th Ave NE Calgary, AB T2E 7E1 403-250-7830

mail@OGLengineering.com

www.OGLengineering.com WWW.OGLEngineering.com
OGL Engineering is a professional engineering company registered with APEGA
and CEA. We have full in-house execution
capabilities for a wide variety of geomatics
engineering, air survey and GIS projects.
Our head office is located in Calgary, Alberta, Canada, with hangar facilities located
at Springbank Airport (CYBW).

OUTAOUAIS FLYING CLUB

21 DU TAMARAC GATINEAU QC J9H 6T3 819-332-0552

PARACHUTISME ATMOSPHAIR

438 CH VILLE MARIE LEVIS QC G6C 1B5

www.atmosphair.com

Un saut en parachute represente pour la plupart d'entre nous le moment le plus fort de notre existence. Notre mission est de vous faire vivre cette experience incroyable en toute confiance.

PASSPORT HÉLICO

10-3320 AVENUE DE LA GARE MASCOUCHE QC J7K 3C1 450-474-4888

www.passport-helico.com Fondée en 1989, Passport Hélico est reconnue pour la qualité de ses services qui sont: Formation, nolisement, achats/ventes et entretien d'hélicoptères, services de hangar. Founded in 1989, Passport Helicopters in recognized for the quality of its services which are: Flight training, chartering, sales and servicing, hangaring of helicopters

PRAIRIE AIRCRAFT SALES LTD. 408C OTTER BAY, SPRINGBANK **AIRPORT**

CALGARY, AB T3Z 3S6 403-286-4277

http://www.prairieaircraft.com/ kathy@prairieaircraft.com Prairie Aircraft Sales Ltd., operated by Kathy Wrobel, has been in business for over 50 years. We were the Exclusive Cessna Dealer for both New Caravan and New Piston Aircraft for all of Western and Northern Canada. Prairie Aircraft specializes in aircraft ranging in all sizes for

pre-owned aircraft for sale **PROVINCIAL AIRWAYS**

BOX 2170 MOOSE JAW SK S6H 7T2 877-717-7335

http://provincialairways.net Aerial application, fuel, parts & service.

PURPLE HILL AIR

22678 PURPLE HILL RD THORNDALE ON NOM 2P0 (519)461-1964

www.purplehillair.com Aircraft painting, structural repairs, annual inspections. Transport Canada AMO74-98. Builder assist in amateur built aircraft. Aircraft interiors

REPOLOGIX INC.

225 THE EAST MALL, SUITE 1662 TORONTO ON M9B 0A9 416-248-1229

www.repologix.com REPOLOGIX Inc. is Canada's leading aircraft repossession company.

RICHARDSON BROS (OLDS) LTD

RR 3 SITE 11 BOX 19 OLDS AB T4H 1P4 403-556-4466

ROTECH MOTOR LTD

6235 OKANAGAN LANDING RD VERNON BC V1H 1M5 Exclusive Canadian distributor for Rotax aircraft engines, parts, accessories.

ROYCO AIR SERVICE

RANGE RD 234 THREE HILLS AB TOM 2A0

www.roycoairservice.com

We are a family owned aerial application company based in Central Alberta. Established in 1976, Royco Air Service aims to provide reliable and responsible service to our clients in the agriculture industry. Find out more about how we can help you.

STUDENT AVIATION FINANCIAL

ENTERPRISES CORP 80 BLAZER ESTATES RIDGE CALGARY AB T3L 2N7 403-397-6107

studentaviationfinancial.ca

Providing financial assistants across Canada to all inspiring students wanting to obtain the PPL and CPL license, muti, IFR, float, instructor rating.

SUMMERSIDE AIRPORT - SLEMON PARK CORP

PO BOX 90

SLEMON PARK PE C0B 2A0 (902)432-1760

www.slemonpark.com Slemon Park is home to aerospace companies like Atlantic Turbines. Honeywell Aerospatiale and Testori Americas.

ST. ANDREWS AIRPORT INC

202 - 705 SOUTH GATE RD ST. ANDREWS MB R1A 3P9 (204) 336-3250

www.standrewsairport.ca General Aviation Airport. Flight training and aircraft maintenance.

TANIS AIRCRAFT PRODUCTS

(952) 224-4425

www.tanisaircraft.com

Tanis Aircract Products produces the most tehnologically advanced and only FAA. TCCA, & EASA certified preheat systems, products, and insulated engine covers for the aviation industry.

THE ABBOTSFORD FLYING CLUB

30540 APPROACH DR ABBOTSFORD BC V2T 6H5 604-239-0199

www.abbotsfordflyingclub.ca The Abbotsford Flying Club is a non-profit organization that rents out aircraft for pilots that enjoy leisure and personal flying

THE NINETY-NINES INC. (MB CHAPTER)

HANGAR 24A LYNECREST AVE 57119 MURDOCK RD PO BOX 55, GROUP 612 SS6 WINNIPEG MB R2C 2Z3 204-261-1007

The Manitoba Chapter of the Ninety-Nines, Inc. is a non-profit organization with charitable CRA status. The Manitoba Chapter of the 99s is the first chapter world-wide to gain approval to own a club plane.

THE VANCOUVER FLYING CLUB

103 - 4323 KING STREET DELTA BC V4K 0A5 778-889-5022

www.yvrflyingclub.com/contact-us Our club hangar is conveniently located at Boundary Bay Airport, Delta, B.C. (CZBB). CZBB's central location is easily accessible from everywhere within the Metro Vancouver area. It is just 20 minutes from Vancouver International Airport (YVR) and less than 40 minutes to downtown Vancouver. Surrey and the US border.

VICTORIA FLYING CLUB

101-1852 CANSO BOAD SIDNEY BC V8L 5V5 (250) 656 2833

http://www.flyvfc.com

The Victoria Flying Club has been training pilots and meeting the needs of recreational and career flyers for more than 70 years.

WATERLOO WELLINGTON FLIGHT CENTRE

3 - 4881 FOUNTAIN ST N BRESLAU ON NOB 1M0 (519)648-2213

Offers Flight Training - Recreational, Private, Commercial, Multi-engine, and IFR with 18 training aircraft. Also, a two-year Professional Pilot Diploma Program with Conestoga College

WILSON AIRCRAFT

14845-6 YONGE ST STE 353 AURORA ON L4G 6H8 (905)713-1059 Aviation sales & consulting since 1968.

YORKTON AIRCRAFT SERVICE LTD

BOX 1604

cell:647-227-6996

YORKTON SK S3N 3L2 (800)776-4656 AMO # 125-90 "We-re there to keep you in the Air'





AERO ATELIER C.M. INC. Aircraft & Helicopter Engines

- Overhaul Repair
- Warranty Carburetor
- Magneto Cylinder
 - Flexible Hose

We sell Engines & Parts

Manuel Mongrain Engine Quotes: manuel.mongrain@aeroatelier.aero Guy Blais

Parts / Sales & Purchasing aeroatelliercm@bellnet.ca

$\label{eq:aero} \textbf{AERO ATELIER C.M. INC.}$

1281, Chemin de la Vigilance, C.P. 2018 Shawinigan (Québec) Canada GOX 1L0

Phone: (819) 538-6768
Fax: (819) 538-6710

Web Site:

www.aeroatelier.aero

AMO.303.91 / EASA.145.7239



Skywagon City Corp.

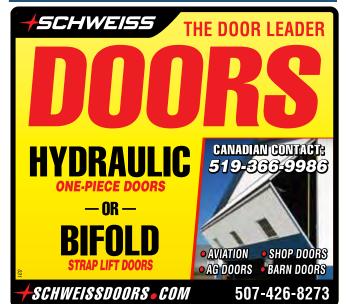
- Fuselage parts, cowlings, tail feathers, engine parts and mounts, wings, interior parts and more, avionics and instruments
- No parts too large or too small
- We also have a homebuilders corner (wheels and brakes), instruments, landing gear and lots more
- Skywagon City will purchase damaged and derelict aircraft or inventories
- Currently parting out 50 aircraft

Your Premiere Source for Pre-Owned Parts for Cessna: 150/152/170/172/180/ 182/185/206/210

and several Piper models

2851 Concession Rd. 7 Brechin, ON, LOK 1BO

parts@skywagoncity.com 705-484-5667 Fax 705-484-5606



Canadian Plane Trade

JANUARY PRINT DEADLINE: DECEMBER 6, 2019

BUDGET WORD CLASSIFIED AD (includes a 30-day online ad) Members: \$40.50 + applicable taxes (35-word maximum) Non-members: \$45.00 + applicable taxes (35-word maximum)

STANDARD PHOTO CLASSIFIED AD (includes a 30-day online ad)
Members: \$72 + applicable taxes (35-word maximum)
Non-members: \$80 + applicable taxes (35-word maximum)

In case of error or omission, COPA Flight will be responsible for one insertion only.

Ads received after deadline will appear in the next issue.

Additional words are permitted in the magazine at an additional cost.

COPA members - Add \$0.85 per additional word (over 35 words)

Non-members - Add \$1.00 per additional word (over 35 words)

FOR FULL ADVERTISING OPTIONS AND RATES PLEASE VISIT:

canadianplanetrade.ca

Classified advertising includes 30 days online and placement in the next issue of COPA Flight magazine. COPA members receive a 10% discount.

Use the website to enter your ads online or email admin@copaflight.ca for assistance

Payment is easily made online at canadianplanetrade. ca* For enquiries, call: 604-999-2411 or 800-656-7598

*Charges will appear on your statement as Canadian Aviator Publishing

COPA Members, your VIP Aviation Program is ready for takeoff.

Membres COPA, votre programme d'assurance VIP est prêt à décoller!



Preferred Rates. Comprehensive Coverage for COPA Members!

VIP Gold. For aircraft owners seeking full motion hull and liability coverage. NEW! Accident Forgiveness.

VIP Silver. For aircraft owners seeking not-in-motion hull and/or liability only coverage. Clients can purchase coverage online anytime or anywhere 24/7.

VIP Bronze. For pilots renting or borrowing aircraft. Peace of mind and protection for aircraft owners/instructors.

Accident Death and Dismemberment Insurance: You can add to your aviation policy not just when you're flying but around the clock 24/7.

AIG Insurance Company of Canada is the licensed underwriter of AIG Commercial and Consumer insurance products in Canada. Coverage may not be available in all provinces and territories and is subject to actual policy language. Non-insurance products and services may be provided by independent third parties.

Tarifs préférentiels. Couverture complète pour les membres de la COPA!

VIP Or. Pour les propriétaires d'avions voulant une assurance complète sur la coque en mouvement ainsi qu'une assurance de la responsabilité civile.

NOUVEAU! Pardon d'accident.

VIP Argent. Pour les propriétaires d'aéronefs qui cherchent une assurance sur la coque au sol seulement et/ou responsabilité civile.

VIP Bronze. Pour les pilotes qui louent ou empruntent un aéronef. La tranquillité d'esprit et la couverture adéquate pour les propriétaires/instructeurs d'aéronefs.

Ajoutez l'assurance Accident 24/7 et minimisez votre risque.

La Compagnie d'assurance AIG du Canada est le souscripteur autorisé des produits d'assurance commerciale et d'assurance consommateur au Canada. La présente protection pourrait ne pas être disponible dans toutes les provinces et tous les territoires et est assujettie aux termes et aux conditions des polices en vigueur. Les produits et les services de nature autre que l'assurance pourraient être fournis par des lierces parties indépendantes.

For more information/
Pour plus d'information
please call/appelez
1-855-VIP-COPA,
email us at/courriel
VIPCOPA@magnesaviation.com
or visit/visitez nous
magnesaviation.com/copa









AIRCRAFT SPRUCE +









AVIATION'S BEST WEBSITE

SAME DAY SHIPPING

10,000,000+ PARTS IN STOCK



AVIONICS
Garmin • Artex • Dynon
Appareo • Icom • uAvionix



INSTRUMENTS Mid-Continent • Sigma-Tek JPI • RC Allen • El



LIGHTING Whelen • AeroLEDS Aveo



BATTERIES Concorde • Gill Start Pac • True Blue



TIRES Goodyear • Michelin Specialty Tire



ENGINE ACCESSORIES Champion • Tempest Hartzell • Kelly



ENGINE PARTS
Lycoming • Continental
Superior



PILOT SUPPLIES

Jeppesen • ASA • Gleim • Rosen
Bose • Lightspeed



2019-2020 CATALOG! 1000 PAGES OF PRODUCTS!



VISIT OUR BRANTFORD STORE

Aircraft Spruce Canada is at 150 Aviation Avenue on Brantford Municipal Airport. This 20,000 square foot facility serves as a fully stocked distribution warehouse for our Canadian customers!

ASK FOR YOUR STAMP!

www.aircraftspruce.ca
Call Toll Free 1-877-795-2278

FAA AERONAV CHARTS IN STOCK AT AIRCRAFT SPRUCE!