2013 NOVEMBER

the NANAIMO flying club

AROUND THE PATCH AT NFC...

NEVER FLY IN THE SAME COCKPIT WITH SOMEONE BRAVER THAN YOU.
- RICHARD HERMAN, JR., 'FIREBREAK'

Notes from The Don...

2013 is drawing to a close and perhaps it is a good time to reflect on the changes that have been made during the past year.

The purchase of a Club Plane is probably the most important change. It enables members that do not have their own plane to stay current and enjoy the thrill of flight.

The Club has been very active during the past year. It is encouraging to see our members using the Club rooms during the week having coffee and planning their trips for the hundred dollar burger. (continued next page)

In this Issue:

So, I'm a little late, but let's call this the November Issue anyways. Lots of things have been happening - more than I can keep up with, so reports and photos from club members are always welcome. Here's what's on tap in this issue -

Thanks to Mike Wilkey for my new Captain Grinch avatar!

Notes from The Don…(continued):

The monthly fly-ins have continued and are a huge success. Pilots from The Island and lower mainland continue to enjoy the hospitality of the Club. In addition we have a "Hump Breakfast/Brunch" on the mid- month Wednesday. That enables a dedicated group of pilots the swap even more stories.

Building improvements include painting both washrooms, and the kitchen. It is amazing what a coat of paint can do. Darrle Schlitz power washed the upper deck and applied the stain to make it look like new. Darrle also painted the kitchen.

Some inexpensive additions like the new picnic tables have also been welcome.

There were unseen changes in our communication system thanks to David Powell-Williams, Brian Zetts and Autumn Unanetz. The replacement of the heating fuel tank was accomplished without spilling oil or making a mess. The repairs to the NFC Ramp have been completed. The ramp area by the Pumps should be good for another 5 years

Many Club members worked hard cleaning, cooking, cutting the grass etc and making NFC as first class Club. None of this would have happened without the dedication and support of the Executive and Directors.

Thanks to all.
Cheers,
Don

A FOOL AND HIS MONEY ARE SOON FLYING MORE AIRCRAFT THAN HE CAN HANDLE.

FLY SAFE

Photos thanks to Denis Berubé

Grant's Aeon Party

Grant Howatt's life and accomplishments were celebrated and toasted one more time on Saturday evening, October 19 as dozens of friends and family members gathered at the NFC clubhouse for an evening of remembrance.

"Oh, that makes sense. If Grandpa was in his plane then he was already half way to heaven and God just had to reach down and take him the rest of the way."

GRANT HOWATT
Feb 14, 1947 - Aug 16, 2013
Age 66

Thanks to Gord Cluchey for this report

NFC Elections 2013

As the Nanaimo Flying Club executive elections loom, here are some important notes from the October draft of the minutes:

"There was considerable discussion over the use and format for proxy voting. The general proxy conditions are that it be signed by the person giving the proxy (or in email form), and contain the name of the person giving the proxy, the event, date of the event, what the proxy is for, and contact information (address, phone number and/or email)."

It is important all members either attend the meeting on November 17th or provide someone with your proxy.

Proxy votes should be "clean emails" that speak only to the issue of a proxy. There are key elements that must be included in a proxy.

- The name of the organization must be named

- The event requiring a vote and the date of that event [NOTE: Specifying a date imposes an expiry date for the proxy which prevents someone from using it for future dates/purposes].

- The way in which the proxy may be used and/or any limitations imposed by the proxy.

- Although a true proxy should be signed and dated, the Club has a long-standing practice of allowing "unsigned" emails. The Club may contact you to confirm your submission of a proxy.

- The proxy is to be submitted to a member of the Executive in writing or by email not later than one week before the elections; ie, not later than **Sunday, 10 November.**

Example:

[Date of writing] BY PROXY

I, [insert your name], declare that I am a member of the Nanaimo Flying Club in good standing. I wish to exercise a proxy vote in lieu of a secret ballot for elections to be held November 17, 2013. My vote is to be cast in support of [name of person or persons you are in support of] for any position on the Nanaimo Flying Club Executive and/or Board, including but not limited to [declare any and all conditions associated with the use of your proxy] eg. limited to specific positions/people, etc.

PROVIDE YOUR NAME HERE

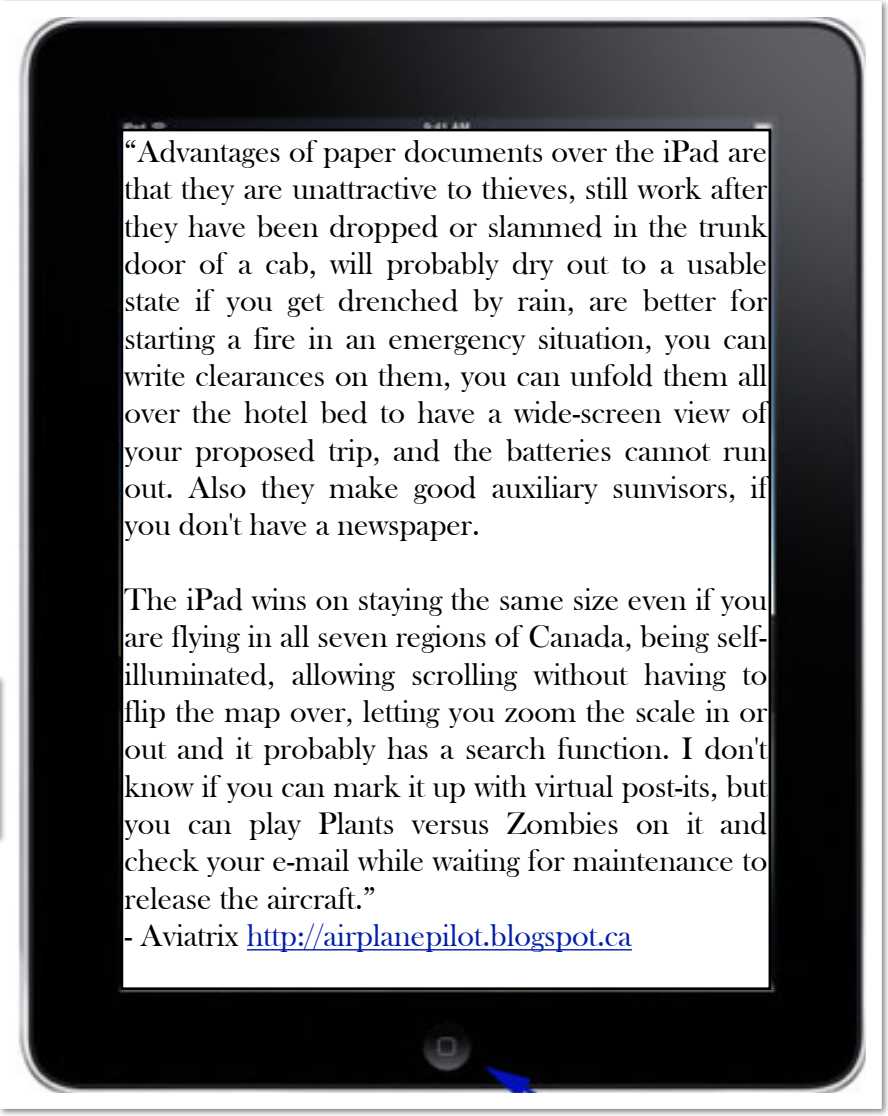
PROVIDE YOUR ADDRESS HERE

PROVIDE YOUR PHONE NUMBER HERE

Aviation Apps reviewed

First iPhones and now iPads, along with a growing number of Android-based products, are bringing really useful apps to general aviation. For not much money, we can turn our cockpits into electronic marvels that would make even a Boeing pilot drool. Of course most Airbus pilots claim that Boeing pilots always drool, drag their knuckles on the ground, and get really nervous without a big pole between their legs to grab hold of. (The control column! I'm talking about the control column!)

I'm currently using two popular iPad apps. I think they are both excellent products so here's a short overview of each to give you an idea if they might be useful to you. Before deciding if electronic apps are for your cockpit, read this excellent comparison of ipad apps vs. paper maps, beautifully expressed by one of my favorite aviation bloggers, Aviatrix (sidebar)-->



ForeFlight is probably the industry leader when it comes to cockpit apps. For Canadians the thrill was pretty limited until recently when the VFR Navigation Charts (VNC) and VFR Terminal Area (VTA) charts became available. Now for a very reasonable number of C$ we can have a complete library of Canadian VFR and IFR navigation charts as well as the entire contents of the Canadian Flight Supplement (CFS) on board our iPads and always up to date! This library and ongoing amendment service alone makes the app worth the money.

Of course ForeFlight also makes navigation calculations totally trivial. As quickly as you can type in the waypoint names of your flight route, or click them on the map, the flight plan is created along with the estimated times enroute, required tracks and fuel consumption. I predict that the good old E6B calculator will soon be relegated to the same antique tool chest as the sextant and radio range.

Along with all this aviation data and information library, the ForeFlight subscription also includes more aviation weather chart access than most of us will ever need. It's like having the entire met department at a regional FSS in your flight bag. This part of the app does require either Wifi or Cell Data access to the internet to keep up-to-date.

Pre-flight planning is certainly where ForeFlight shines.

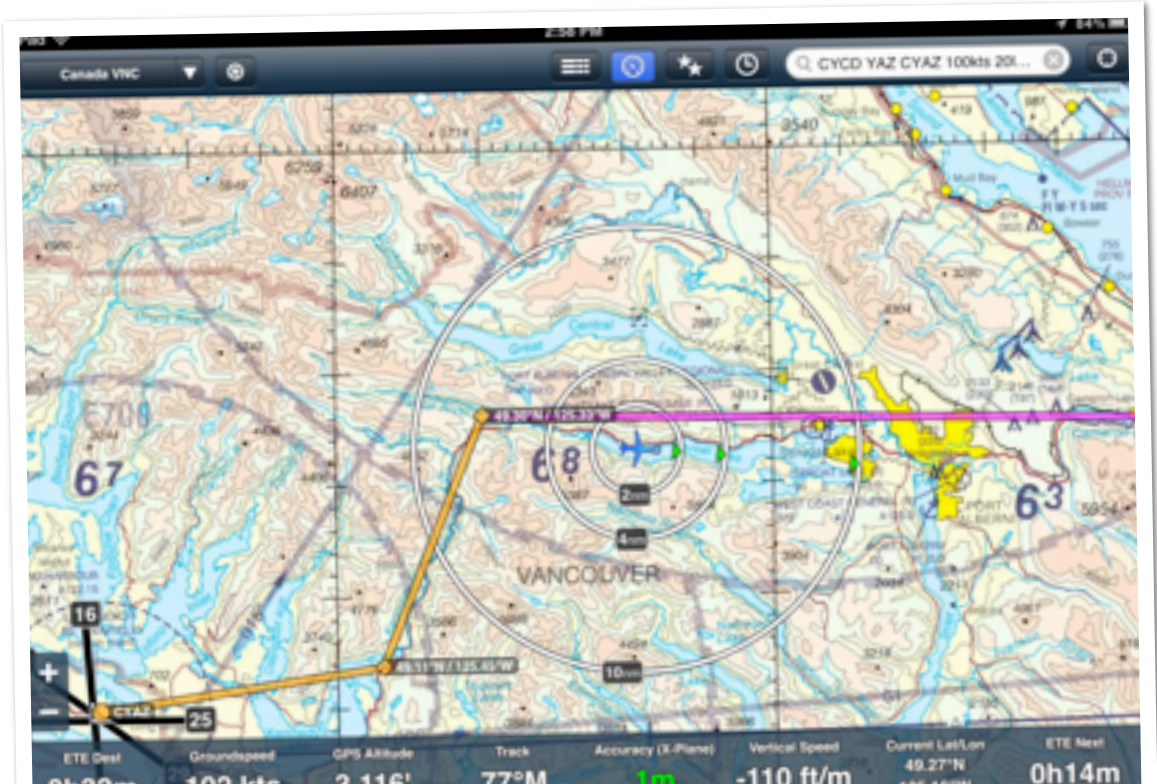
Air Navigation Pro does not (yet?) include access to Canadian VFR charts, but it does have a decent generic ground map that is sufficient for following ground features in flight, and this map goes everywhere you want to fly.

Furthermore, ANP includes a three dimensional database of the airspaces where you'll be flying, so at the touch of the screen you can check if that next boundary includes airspace that requires you to be talking to someone.

Of course Air Navigation Pro includes the ability to build flight plans by typing in navigation points, and/or clicking a point on the map display. And it also includes basic data for airports regarding runway orientation and dimensions and airport frequencies. It lacks the suite of meteorological charts but does include access to METARS (with internet access). ANP does include a Weight And Balance calculator.

Where Air Navigation Pro really shines is during the enroute phase. First of all, it provides a choice of navigation instruments to help keep you on track. You can select either a simple NDB indication, or a traditional VOR needle or a full-up HSI display.

ANP's 3D terrain database also provides the ground profile for the current leg of the trip as well as a terrain awareness mode which is exceptionally handy for pilots flying in the vicinity of Cumulo-Granite structures. Any parts of the planet that extend above your current altitude are displayed in red on the navigation map, making it a lot easier to find the correct pass in a crowded landscape of mountains.



ForeFlight during a simulated flight from Tofino to Nanaimo, via the Alberni highway.

(Comparing different routes is a simple task with these apps.) The magenta leg is current but I've wandered off to follow the lake.

Other views and orientations are available...

Touching inside any outlined airspace segment pops up a list of all applicable classes of airspace in that area. The frequency is not included and you'll have to look that up somewhere else. The bottom window shows the terrain profile for the selected flight plan segment.

Staying in the correct valley is very easy in this case, but not always so when following a more convoluted route through high passes. It's a nice aid to have the profile view (bottom of the display), and the terrain awareness feature confirm that you will indeed clear that peak up the route, or ensure that you are taking the correct turn through a narrow pass.

The HSI display in the bottom left corner automatically updates as each leg of the trip is sequenced and the heading 'bug' gives real-time indications to keep you on the selected course.

Known Icing?

The vagaries of regulations and icing conditions

Recently, at the clubhouse, while watching the fog and showers sweep across CYCD, the question was raised as to what comprises "known icing" when it comes to making that fly/no fly decision? We aren't the only ones to wonder. A while back the FAA issued a letter to clarify the question for our American cousins, but then issued a re-clarification circa 2009. The latest version of FAA's interpretation is available online at the AOPA.org website. It says, in part: "The new letter of interpretation stresses that pilots should have the necessary weather knowledge to make sound flight planning decisions." Amen.

But what's the deal in Canada? How does our regulatory body interpret the flight into known icing conditions?

605.30 No person shall conduct a take-off or continue a flight in an aircraft where icing conditions are reported to exist or are forecast to be encountered along the route of flight unless

(a) the pilot-in-command determines that the aircraft is adequately equipped to operate in icing conditions in accordance with the standards of airworthiness under which the type certificate for that aircraft was issued; or

(b) current weather reports or pilot reports indicate that icing conditions no longer exist.

This article from the Aviation Safety Letter archives would be a good review for anyone planning some winter flying:

Aviation Safety Letter 4/2000

Avoiding Ice Fright — Planning Ahead Minimizes the Risk of Icing

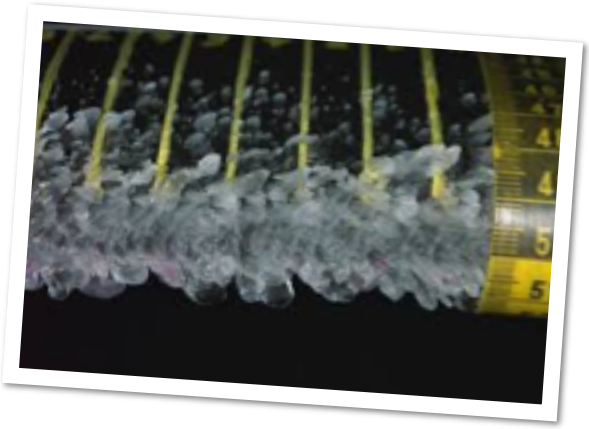
by Thomas A. Horne, AOPA Editor at Large; this article was originally published in the October 1999 Issue of AOPA Pilot; it has been edited for space and reprinted with permission.

Clear ice is a near coating over the airplane's leading edges

An inadvertent encounter with icing conditions ranks right near the top of a pilot's worst fears. Even small ice accretions can decrease an airfoil's lift, increase drag, and cause dangerous drops in airspeed. That is why the cardinal rule of thumb is to take evasive action fast at the very first sign of airframe icing. Having ice-protection systems, or flying an airplane certified for flight in known icing conditions,

can buy you some time to make your escape, but know this: Many airplanes with full complements of ice protection equipment and known-icing certification have crashed after lingering too long in icing conditions.

How it happens — A pilot receives a weather briefing mentioning the chance of icing conditions, or even reported icing conditions, and launches anyway. Or, a VFR-only, or even instrument-rated, pilot continues flying into deteriorating weather, eventually runs into instrument meteorological conditions, flies into clouds, and ices up.



Icing-related accidents closely resemble one of the biggest killers in general aviation — continued VFR flight into instrument weather. The antidote to these accidents? Maintain better-than-VFR separation minima.

Types of icing — There are two basic types of icing — clear and rime. Clear ice occurs most often in the 0 to -10°C temperature range. As the name implies, clear ice is a near coating over the airplane's leading edges. It's often found in cumulus clouds and unstable conditions. Rime ice usually lurks in stratiform clouds with temperatures between -10 and -20°C. It has a milky pebbly appearance, and first shows up as a thin white line on wing leasing edges or other airframe protuberances, such as outside air temperature probes and antennas.

The icing process occurs when an airplane flies into clouds or precipitation composed of supercooled water droplets. Supercooled droplets are liquid but at freezing temperatures. They remain liquid until an airplane flies into them. Then they quickly freeze on impact with the leading edges. Rime ice is usually slower to build than clear ice.

The worst of the worst — High on the danger scale is freezing rain (abbreviator: FZRA). It is a fast-forming type of clear ice that occurs primarily in advance of winter warm fronts. It's caused by rain, snow, or ice crystals falling through a warmer layer of air at lower altitudes. Very large droplets associated with this phenomenon run far back on airfoil surfaces and can quickly disrupt lift.

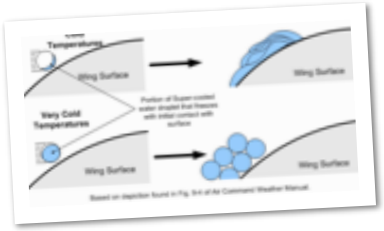
But as bad as freezing rain is, freezing drizzle (FZDZ) is worse. It is characterized not just by large supercooled droplets, but also by its extremely high liquid water content. When freezing drizzle strikes an airplane, ice formations can become large and strangely shaped. Ridges of ice may form along the entire wingspan, causing aerodynamic havoc.

Freezing drizzle was studied heavily after the October 31, 1994, crash of an ATR-42 in Roselawn, Indiana. The National Transportation Safety Board (NTSB) in its final report on the occurrence (NTSB Report DCA95MA001) concluded that the aircraft experienced an uncommanded roll excursion and crashed during a rapid descent. The NTSB attributed the loss of control to a sudden and unexpected aileron hinge moment reversal that occurred after a ridge of

ice accreted beyond the de-ice boots. Researchers determined that supercooled "drizzle drops" likely caused the ridges of ice to form aft of the de-ice boots.

Freezing drizzle seems to occur most often in the Great Lakes and maritime regions, where the air in frontal systems can be loaded with huge amounts of liquid water. Results are pending from additional research, but the prevailing opinion these days is that freezing drizzle is predominantly a low-altitude phenomenon. The ATR's freezing drizzle encounters occurred between 10,000 and 8000 ft MSL, when it descended in a holding pattern.

Escape strategies — Viable strategies for escaping icing conditions depend on the conditions at hand. A descent to altitudes with warmer temperatures may solve the problem. A climb to on-top conditions can also do the trick if your airplane has the power to climb high enough and if you're certain of the nearby cloud-top altitudes. Climbing through clouds in icing conditions carries a risk: If you spend too much time at climb angles of attack, you could cause ice to form on the undersides of the wings and aft of any boot or bleed- or bleed-air-protected leading edge wing panels. This is a sure-fire way to kill lift quickly, which is the reason why some manufacturers publish minimum airspeeds for use when climbing in icing conditions.



Often, a 180-degree turn is the best idea. Presumably, you began your flight in ice-free conditions. A return to the areas behind you, then, ought to take you away from danger. What if icing conditions have closed in all around you? A landing at the nearest airport — or a precautionary off-airport landing — is the best move.

The important thing is to have a preconceived idea in your mind as to what you'd do if you inadvertently encountered icing. If you can't come up with a satisfactory plan that has an extremely good chance of success, then the best strategy is not to fly at all.

If you got'em, pop'em — Pilots who fly airplanes equipped with inflatable de-ice boots should inflate those boots as soon as ice forms on wing leading edges. The time-worn advice was to allow a certain amount of ice to form before inflating the boots. That theory was motivated by the belief that cycling the boots too often would cause ice to make a shell-like formation beyond boot-inflation limits. Ice bridging, it was called.

The latest research indicates that ice bridging is a myth. It's true that more ice will shed if more ice is allowed to build on booted surfaces. But experts now say there's no reason to believe that ice can continue to form and bridge over leading edges and leave boots to helplessly pulsate behind an ever-growing sheath of ice.

A decision tree — Avoiding ice starts at the pre-flight planning stage.

Pilots: If you're not instrument-rated, fly only in VFR, ice-free conditions. Should the weather turn ugly, you must be proficient in the skills and procedures necessary to deal with ATC and perform climbing or descending turns solely by reference to instruments. Those with instruments

ratings should be current and proficient in the basics of instrument flying should the need to shoot a tough instrument approach arise.

The weather: Flying in winter fronts is not a good idea in airplanes without certification for flight in known icing. Even with known-ice certification, airplane performance can be crippled by a bout with severe icing.

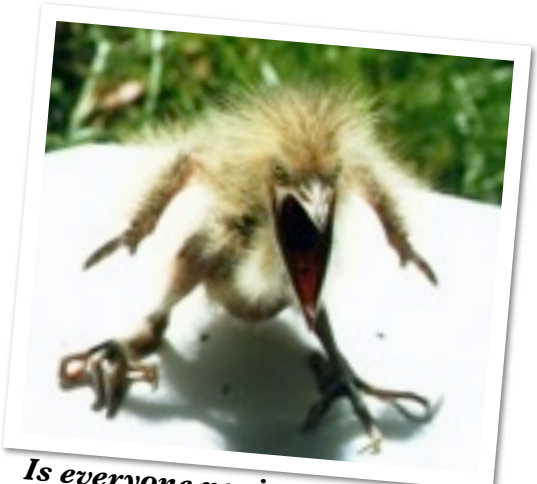
During the pre-flight weather briefing, you're looking for above-freezing temperatures at or above any minimum en route altitudes (MEA). This way, should a descent be necessary you'll lose any ice accretions on the way down. As for cloud tops, they should be low enough that your airplane can top them if a climb out of icing conditions is in order. Ideally, you should have scattered to broken cloud layers along your route of flight and plenty of holes to allow ice-free climbs and descents to your flight-planned altitudes — and to you destination airport. Extra caution is called for at night: Icing and other clouds obviously can't be seen as well.

The airplane: For piston-powered airplanes, turbocharging comes in handy in the climbing-to-on-top department. Turbine-powered airplanes seldom have trouble climbing to on-top conditions — as long as the climb is initiated quickly enough. In the clear air above, any ice accumulations that you picked up down below will take some time to sublimate away (it could take hours), but at least you're not collecting any additional ice.

If you're in a piston-powered airplane with a comparatively low horsepower rating, your ability to climb out of ice is seriously compromised. So is your ability to overcome the drag caused by any ice you might pick up. These airplanes, though they may have heated pitot tubes and alternated engine air doors (tools that should be used on any airplane whenever flying in cloud or precipitation within the icing temperatures range), just aren't cut out for ice flying.

Terrain: Here the concern is flight over mountains and other high terrain. Icing is worse in the air currents over high terrain, and your ability to descend out of icing conditions is severely hampered by high MEAs.

If any of the variables listed above raises any concern, then your pre-flight decision tree has a shaky limb or two. You don't need to ground yourself every time clouds pop in a winter forecast, but you do need to look extra hard to determine if the trip is really critical or if any of the deciding factors raises any level of concern.



Is everyone paying attention!?

Now here's exciting news --
NFC hosts the Century Flight Club 2014

The Century Flight Club has selected the Nanaimo Flying Club as host destination for 2014, which is due to arrive here at the NFC, July 12th, 2014.

British Columbia West Coast Discovery 2014

Open to pilots of Canadian or US Registered aircraft

This is the sixth annual flight and convention organized by the Century Flight Club of Canada. The Chairman of the 2014 flight is again aircraft owner and pilot John Lovelace.

The Century Flight Club has selected Nanaimo on Vancouver Island for our 2014 Destination, the BC Discovery Tour July 8th - 17th, 2014.This Convention is the result of the experiences gained over the past 5 years events with 1000 participants and over 1 million airmiles.

Experience Flying that is only available in BC :Mountains, Glaciers, Beach and Island flights: 5 Day Convention Designed for and Run by Pilots

The Cross Canada Flight Our

1] You have your choice of flying directly to the Convention on July 12 or :

You can join in anywhere along our route from Eastern Canada to BC . We will leave Ontario on Tuesday July 8th and fly to the West Coast stopping at three major centres along the way on July 9, 10 and 11th. [Many of our BC and Washington State Pilots may choose to backtrack east and join the group in Alberta or Ontario for the experience of the group flight]

Our Alberta stop on the July 11th we will feature a mountain Flying seminar to prepare crews for the flight across the Rockies and Coastal Mountains. Senior pilots from BC will be joining here to help lead the flight to Vancouver Island in your choice of two spectacular routings. The preferred Southern Route is the route taken by the early air mail pilots of the 1920's

The Convention July12,13,14,15,16,17 "Get immersed in General Aviation Western Canada Style"

Day 1 Saturday July 12

We arrive on Vancouver Island Saturday July 12th and everyone gets assigned parking which they will keep for the week. Crews board our complimentary shuttles to get whisked to the Coast Bastion hotel on the Nanaimo Harbour . Saturday Night is the informal "Pub Night" at the hotel, always a favourite activity to kick back and relax after a long flight.

Day 2 Sunday July 13

Our "Wings Over Vancouver Island" day . The public is invited to come out and talk to our pilots and this year we will be featuring a static classic display . We anticipate this fly in will likely be the largest Canadian Fly-in event of the summer. Sunday will feature two workshops at the airport a] One workshop will feature Club Chairman John Lovelace a veteran TV Producer as he presents air to air photography tips for pilots who want to learn how to take great air to ground shots or air to air shots 2] The second workshop will feature hands on building your own aircraft project . Sunday night is our complimentary meet and greet Reception.

Day 3 Monday July 14:

A special day set aside for our West Coast speakers and workshops. It's designed to make our members better pilots set to the backdrop of Mountain and Coastal Flying of the West Coast .

Our Key Note speaker is Mike Swanigan a former Vice President and now check Pilot with Alaska Airlines .

We have also lined up a senior coastal float plane pilot. We have a Mountain flying expert and a veteran who will teach us how to land on a tidal beach.
In all there will be 8 different topics during the day all designed to help the pilot come away with a West Coast Flying experience.

Non Pilot travelling companions have their choice of exciting non flying options too . Our shuttle buses will whisk you to West coast fishing, Whale watching or you can relax with walking tours on the sea walks . Evening Venues include a secluded island pub accessible only by tiny ferry or dining at any of the great specialty restaurants in Nanaimo.

Day 4 Tuesday July 15:

We put our new knowledge to practice with some special fly outs .These flights are always totally optional . These trips are designed to offer a choice of relaxed or more challenging flights. The "Only in BC theme" is offered by your Glacier Flights or your opportunity to land on a beach, or perhaps choose yourflight to an Island gravel runway . In all we will offer 6 different fly out locations . For those who want to experience West Coast Float Flying we have chartered two Float planes [These flights are available at a special club discounted rate] Tuesday Night we do some hanger flying at our popular "wings" night.

Day 5 Wednesday July 16 :

The "Only in BC" theme is continued with a second full day of flying. Tuesday's itinerary is offered again which gives our pilots the opportunity to experience more unique destinations on the itinerary. Wednesday Night is our complimentary awards banquet at the Coast Bastion. This banquet is always the highlight of our convention when certificates of achievements are awarded including the Presidents award for the club member who made a significant contribution to the convention. And there will be many other fun presentations. We promise that everyone gets a certificate at our big night and comes away with a glossy group photo.

Day 6 Thursday July17 :

This is our official Departure day when we say goodbye to new and old friends. Departures begin at 0800 hrs when the sky over Nanaimo is filled with the sound of our 100 aircraft as we takeoff and head back to our home airports across Canada and the USA.

TRY TO STAY IN THE MIDDLE OF THE AIR. DO NOT GO NEAR THE EDGES OF IT. THE EDGES OF THE AIR CAN BE RECOGNIZED BY THE APPEARANCE OF GROUND, BUILDINGS, SEA, TREES AND INTERSTELLAR SPACE. IT IS MUCH MORE DIFFICULT TO FLY THERE. - UNKNOWN

Member Profile: Peter Meyers

Until summer 2012 you may recall seeing a pretty little yellow homebuilt aircraft at CYCD. The Meyers II was a meld of wings and forward fuselage from the Zenith 601HDS and rear fuselage and tailfins from an RV4. Unhappily it went swimming in the Salish Sea just off Nanoose a little over a year ago. Now Peter is busy building the Meyers III. The fuselage is his own invention, featuring tandem seating. The airfoils are derived from another RV project.

Peter's aviation background involves flight instructing as well as flying charters in such interesting aircraft as the De Havvilland Dove, and the Beech 18. He also has significant experience flying planes that are actually meant to land on water.

Pete is sometimes referred to as "Mr. e-bay" because of his uncanny knack for finding online deals on aircraft parts. He's been known to buy two used magnetos, rebuild his own, then turn around and re-sell the remaining parts again for a profit.

When he's not building the Meyers III, Peter is often found providing checkouts for various pilots around the Nanaimo airport, or flipping burgers at club events.

A MALE PILOT IS A CONFUSED SOUL WHO TALKS ABOUT WOMEN WHEN HE'S FLYING, AND ABOUT FLYING WHEN HE'S WITH A WOMAN.