

## The Curious World of Plane Spotting

by Carla Deminchuk

"That ain't no Boeing. Too small. Looks like one of those puny jobs that come from South America. Umbrayee ... or whatever they call it," declares Melvin.

"You mean Embraer," replies Melvin's younger brother Howard as he focuses upon the approaching jet from behind a pair of good binoculars. "It is not Embraer. Nor Bombardier. Definitely the 737NG. Notice the winglets, Melvin? Probably the 700 or 800 series."

"All wrong," retorts Melvin. "It's an Airbus then, but – stars 'n garters – give me a good old prop. A Vickers. A DC-6. Even a 707 or DC-8. Fifty years ago I could tell them apart with one bad naked eye and a patch over the other good one."

Such is the colloquy outside a faded burgundy Oldsmobile parked at the end of YVR's south runway on a barely warm Sunday afternoon in June.

As with most days, Melvin and Howard are not alone. They belong to a local flock of aviation enthusiasts known as plane spotters. There is a good crowd clustered at the perimeter fence, all craning their necks and heads skyward. (Stiff necks are a common spotting complaint. Anyone dealing over-the-counter Robaxacet would make a killing here.) As Howard's correctly-identified Boeing 737-700 makes its way over the cyclone fence, plunks itself onto the tarmac and engages its thrust reversers, the noise is deafening. No one wears any ear plugs. Aircraft noise is a top-

ten hit at this hoedown (and one of the tenets of aircraft identification).

While modern plane spotting may appear to some as a tedious and bizarre way to spend one's free time, aviation enthusiasts have been flocking to airfields since the Wright Brothers. During World War I, World War II and the subsequent Cold War, aircraft spotting was sheer survival instinct. British and Canadian citizens were given Axis and Allied aircraft identification charts and were urged to become members of the RAF/RCAF Observer Corps. Allied, you gave a patriotic wave. Axis, you headed for cover.

After WW II, the popularity of plane spotting was exponential to the boom in civil aviation. Today there are thousands of plane spotting hobbyists worldwide. (Purists prefer "aircraft spotting" because helicopters



and gliders are also spotted.) Why do they do it? A serious interest in aviation is a common denominator. Another attraction is the fact spotters can pursue their hobby solo or join a variety of organizations. Many spotters are also serious photographers and publish their photos in online blogs, spotting websites, and aviation journals. The spotter's dedication is as varied as the types of the aircraft overhead. Some just want an hour's diversion and come as they are. Those who are more dedicated arrive with a notebook, high-

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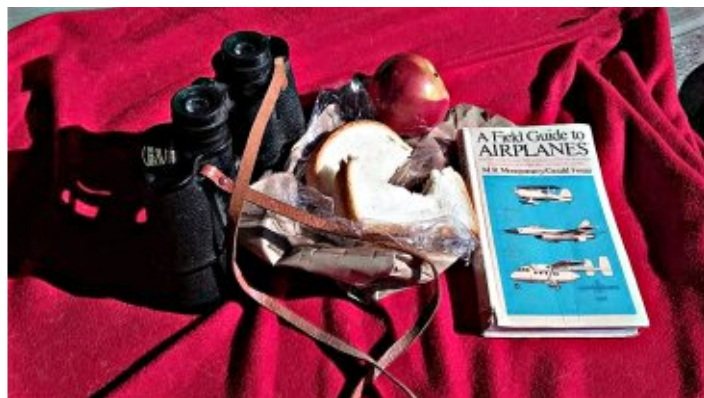


**Please visit our website [www.canadianflight.org](http://www.canadianflight.org) for more news and updates on events.  
Follow us on the Museum facebook page and twitter.**

# Plane Spotters

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intensity binoculars, and a sandwich in the back pocket. The super dedicated come armed with ATC scanners, telephoto lenses, and apps on the smart phone that track the movements of certain aircraft, and are usually too busy to eat. Those bordering on OCD may fixate on a particular airline and are not happy until they spot every tail number in the fleet. That may entail a dozen. Or hundreds. However, for the most part, aircraft spotting is a more relaxed pastime.



One has to wonder if plane spotters ever leave the ground. Hardcore spotters often fly to destination hot spots like St. Maarten where the air traffic swoops in ten meters above their heads. Spotting is also a family affair. Grandparents with grandkids. Parents with sons and daughters. Everyone's favourite uncle with nephews, nieces, and hangers-on in tow. Load 'em up and head to the airport or another good viewpoint. Spotting brings out the kid in all of us.

Not surprisingly, many of those spotting youngsters become private and professional pilots, or pursue other careers in aviation. Since aircraft spotters spend so much time at the airport, many figure they might as well work there. Ask any pilot if they have ever plane spotted, and 99.9% will say they have. Museum pilot Bill Findlay would look for the DC-6s and Constellations that flew over his boyhood home in Penticton. Bill went on to a military then civilian flying career with Wardair, Canadian Pacific, and Air Canada. Former Glidepath Editor Bruce Friesen and his Winnipeg buddies formed the Observers Club of Aircraft. Base of operations was the Esso shack at the Winnipeg airport. Some boys collect baseball cards. Those in the Observers Club collected aircraft registration numbers. Competition was fierce – even during those minus 40 degree winters. That did not thaw Bruce's ardour for flight as he is now an avid glider pilot. Museum volunteer Gord Fraser would also scan the hard blue sky of Alberta's Peace Country. Gord's prize spot was a repurposed WW II A-26 Invader turned water bomber. It became Gord's inspiration. If anyone tried to throw water on those flight

aspirations, Gord would show them. And he did. Gord flew the ultimate whopper in any spotter's lens or record book – the double-decker A380 for Emirates.

So, how does vintage aviation or a flight museum fit into today's plane spotting agenda, or do they even fit at all? "Absolutely," says Brian Taylor, a Vancouver spotter. "Many plane spotters visit aviation museums. Aircraft like the Canadian Museum of Flight's Handley Page Hampden are so rare that you will only see them static at a museum, during a museum-related flying event, or air show." What does Brian consider to be the airborne booty of vintage aircraft spotting outside an air show or planned exhibition? "Something like a DC-3 or Lockheed Constellation. Doesn't matter if your bent is vintage, modern, military or civilian, those two belong to the elite club of aircraft that started it all, and would be the catch of any spotting experience," concluded Brian.

Back at YVR's south runway, the overhead traffic has temporarily abated. Melvin and Howard are packing up their folding chairs and empty thermos bottles. When I asked the brothers why they liked to plane spot, Melvin said he wanted to fly those Vickers and Douglas airliners of his youth, but that a bad eye kept him out of the flight deck. After retiring from the waterfront, Melvin thought it would be a good idea to head back to dry land and gawk at airplanes again. He claims it beats drinking coffee at the mall. (When I informed Melvin about the museum's static DC-3, he said he would like to drive out to Langley and see it someday.) Howard says he never wanted to fly, but enjoyed a long career as a high-school science teacher. Faced with post-retirement boredom, Howard decided to join Melvin at the spotters' fence. Howard found spotting to be surprisingly enjoyable. He likes studying the technical specs that differentiate one aircraft from another. Howard also claims he can out-spot his older brother 3 to 1, but Melvin still likes to argue with him.

With a cheery good-bye, the brothers then hopped into the Oldsmobile just as another wide-bodied airliner came screaming towards us. Boeing or Airbus? I wasn't sure. Howard would probably know. And Melvin would say he's wrong.

Regardless, every flight is a marvellous achievement worthy of recognition and record. All the more so with vintage aircraft because they exemplify the timeless dreams of those below, looking up.



## Membership Benefits!

- **Partnerships!** Members are entitled to visit, free:  
*Flight Museum in Seattle*  
*PBY Memorial Foundation in Oak Harbour WA*  
*West Coast Rail Museum in Squamish*  
*Military Education Centre in Chilliwack*
- **Discounts in the Gift Shop of 15%**

## Volunteers Welcome!

*The Canadian Museum of Flight is always looking for new volunteers. We are always in need of history and aviation enthusiasts, of all kinds, from students to retirees, for aircraft restoration, gift shop operations, facility maintenance, and many other tasks. If interested, please contact the Museum General Manager, Mike Sattler, at 604-532-0035.*

*The Glidepath Newsletter is published quarterly by the Canadian Museum of Flight; Editor Carla Deminchuk. Contributions in the form of articles, news items, letters and photos are always welcome, as are comments and suggestions, although no payments are made for manuscripts submitted for publication in the Newsletter.*



# The Canadian Museum of Flight

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Facebook Canadian Museum of Flight  
Address Hangar #3, 5333 – 216th Street  
Langley, BC V2Y 2N3

### Museum Hours

Open daily from 10:00 a.m. to 4:00 p.m.

## Message from your Editor – Summer 2016 Highlights

"I can't believe you spent two days at the end of some runway." Such was the comment from a friend after another article jaunt for Glidepath. I had the time of my life chatting with the often seen but seldom heard niche group known as plane spotters. As you will read in our cover story, plane spotting is a curious, rewarding hobby for many.

In this issue's segment of "Then and Now," we take a look at the tower – "The Tower! The Tower! Rapunzel!" – no, not that tower. Air Traffic Control.

We are also launching two new series in this issue: "Ask the Pilot/Mechanic/Aircraft Restoration Expert" and "Members Supporting Members." Ask the Pilot/Mechanic/Aircraft Restoration Expert is just that. Our museum has a bounty of experts who love to share. So, if you have a question, send it our way. The series kicks off with some questions about the importance of radial engine prop rotation.

"Members Supporting Members" is a profile of a museum member who has a small business or service. We are delighted to begin the series with Vimy Flight Coordinator Bernada Bilic and her RainSafe-T Reflective Umbrellas. Please support those members who have a product or service to sell. Why? It's synergistic: members supporting members = members supporting the museum.

Bernada has also contributed a report on the Sopwith Pup Gifting Ceremony.

Just as this issue of Glidepath was going to press, the September/October issue of Canadian Geographic magazine was about to hit the stands. It features an article about the museum's contribution to the Vimy Flight project.

Will 2017 be an exciting year for our museum?

Yes, it will.

Believe it.

Carla Deminchuk  
Editor, Glidepath

### Letters:

I really liked the airplane boneyard pictorial (Editor's Rove, Spring 2016 issue). If you are (hopefully) planning more articles in the same vein, would you be open to contributions like these Harvards rotting in the grass at the Tillsonburg airport in the 1960s because nobody wanted them?

- Dennis Cardy

Hi Dennis. Nobody wanted them? For those airmen who made the ultimate sacrifice that is like killing them twice. We will always "be open to contributions like these ..." – Carla



# Canadian Museum of Flight – June 19<sup>th</sup> Gifting of the Sopwith Pups

by Bernada Bilic

For almost a year, the museum has been busy building two Sopwith Pups as part of the documentary “Wings of Courage”. The second installment of the trilogy of Sound Venture Productions projects, called “A Nation Soars,” highlights Canada’s first aviation heroes. The full story of all three parts of the trilogy can be seen on [anationsoars.ca](http://anationsoars.ca), including an exciting trailer.

From the first days of travelling to Holden, Missouri, in September of 2015 and returning 3 weeks later with both Pup frames in the back of a 5-ton truck, the project has been an educational and inspirational experience. At the hands of our volunteer Build Team, headed by Ray Fessenden and with the assistance of cadets from 746 Squadron, Lightning Hawk at the Canadian Museum of Flight, the Pups were coming to life.

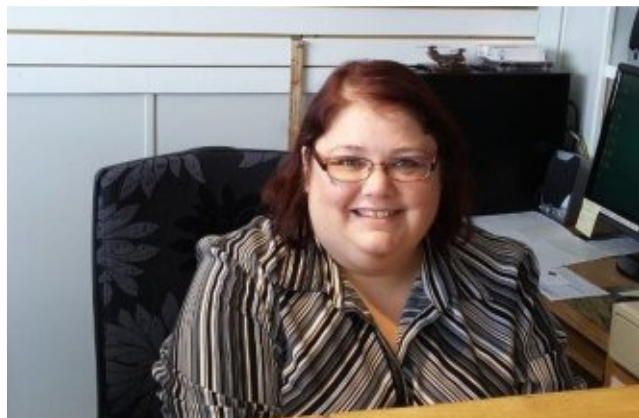
And on June 19<sup>th</sup>, we were delighted to host a weekend of celebration to mark the official ‘Gifting’ of the two Pups by Canadian Heritage to the museum. The Pups are ours! The Gifting Ceremony was headed by Tim Joyce of Sound Venture Productions and the crowd was welcomed by our very own hometown hero and Aviation Hall of Famer, George Miller. Sharing the stage were Mike Elston representing Canadian Geographic, Trevor Sandwell of the BC Cadet League, Mayor Jack Froese, and Dave Arnold, Vice-President of the museum. It was an inspirational combination of organizations and people coming together to celebrate another milestone in the Wings of Courage project.

Still more work ahead for the Build Team as they overcome a number of logistical obstacles to get “Betty” in the air, but their tenacity cannot be underestimated. After a bit of a break to enjoy summer, the Team is back at it hammer and tongs (and more tools that I can name) to get both Pups in the air and ready for next year’s flight over the Vimy Memorial in France on April 9<sup>th</sup>, 2017.

On this November 1<sup>st</sup>, the Wings of Courage documentary will be officially launched in Ottawa and will be airing on CPAC (the Canadian Documentary Channel) starting November 6<sup>th</sup> and through Remembrance Day. It is an exciting year for the museum and all those that have put so much effort into the success of this legacy project. We all look forward to seeing our very own volunteers highlighted and are more than proud to share it with the rest of Canada.



**Above: The Pup Gifting Ceremony. Below: A few of the many people who have invested thousands of hours of their time in constructing the Pup (wingtips at right).**



## Brenda Radstaak – New Front-Desk Administrator

Brenda joined our team in mid-September. During her first week at the museum, Brenda recognized something we already knew: “The volunteers are amazing,” says Brenda. Brenda also loves the number of people who visit from faraway places. “I have met a couple from the Czech Republic. They found the museum online and really wanted to come here. There were also a couple from Florida and people from a few other U.S. states.”

Welcome Brenda!



## Ask the Pilot/Mechanic/Aircraft Restoration Expert

**Want to know something about vintage or modern aircraft? Our museum has a bounty of experts who have flown, fixed, rebuilt or restored everything from an 80 year-old biplane to the Airbus A380. Shoot us your question, and we'll do our best to answer. [info@canadianflight.org](mailto:info@canadianflight.org) (Attention: Ask the Pilot/Mechanic/AC Restoration Expert column.)**

In our first segment, Ben Miller from Surrey wanted to know why radial engines are routinely rotated. We directed Ben's questions to Vic Bentley, one of the museum's mechanical specialists:

Q. During my recent visit to the CMF hangar, someone was going to check the "rotation" on a radial engine. What did he mean by that?

A. Radial engines usually have their oil tank located above the level of the oil sump. The designers, acknowledging the force of gravity, provide valves in the system to prevent the tank from flooding the engine with oil.

Q. What happens if this system does not work as intended?

A. If the engine has not run for some time there can be a slow leak from the tank to the crankcase and then into the lower cylinders. As these are the lowest point in the engine, they can have an accumulation of engine oil in the cylinders.

Q. These engines always seem to smoke a lot when started. Will the oil blow out when the engine starts?

A. The concern is that the piston will come in contact with a cylinder full of oil that has the inlet and exhaust valves closed. This is the old unstoppable force and incompressible liquid trick! Something bad will happen.

Q. What is done to prevent this from happening?

A. As a precaution the mechanic/pilot will rotate the propeller several times before starting the engine. If there is no accumulation of oil the propeller will rotate freely. However, if there is oil in a cylinder a 'hydraulic lock' will happen and it will not be possible to rotate the propeller by hand. Starting the engine in this condition will result in damage to the cylinder or bending the connecting rod in the engine – serious stuff!

Q. What then?

A. The mechanic sighs and goes to get his toolkit and a large oil pan. The spark plugs of the lower cylinders are removed and at least one of the cylinders will have a large quantity of engine oil oozing out. This is drained and the engine rotated to ensure that this has cured the problem. The spark plugs are replaced and the engine is ready to start.



**Vic Bentley, examining an engine part.**

## Retail Therapy – What's in the Museum Gift Shop?

**New and Almost New Books:** *The holiday season will soon be here. One of the museum's pre-loved books would make a great stocking stuffer for the aviation and history buff on your list. For new books, we like Air Canada – 75 Years of Innovation. (Price TBA)*

**Splish, splash, I was takin' a bath:** *Vintage aviator, astronaut, and airline pilot rubber duckies. \$1.95 ea.*

**Vimy Lapel Pin:** *The four coloured boxes represent the four Canadian divisions which fought together for the first time on April 9, 1917, at the Battle of Vimy Ridge. The red represents the First Division, the dark blue the Second Division, the grey-blue the Third Division, and the green the Fourth Division. The order of the ribbon's colours (left to right) reflects the positioning of the four Canadian Divisions facing the German defenses on the day of the battle. \$4.95*



## Members Supporting Members – Small Business Profile

### Bernada Bilic's RainSafe-T Reflective Umbrellas

**(Editor's Note: Do you have a small business product or service to sell? If you are a museum member, send us some information and we'll profile your product or service in an upcoming issue. Please support these business members because it is synergistic: members supporting members = members supporting the museum.)**

**Glidepath:** What are the RainSafe-T Umbrellas?

**Bernada:** They are high-quality umbrellas with a reflective design which makes them highly visible at night and in bad weather. Stay dry and stay safe.

**Glidepath:** How did you get the idea for these umbrellas?

**Bernada:** When I moved to Vancouver from Calgary, I was appalled by the number of pedestrian fatalities and injuries during the long, dark rainy season. It made sense to have reflective umbrellas and RainSafe-T was born.

**Glidepath:** Tell us about those designs. Can we get the umbrellas in different colours?

**Bernada:** It started with the classic stripe. Then I started getting other design requests. I try to add more designs every new season that are fun. We have many colour choices. You can find them all online: <http://www.rainsafe-t.com/>



**Bernada Bilic models a cheerful umbrella.**

**Glidepath:** What is the price range and how do we order your umbrellas?

**Bernada:** \$38 - \$68. Starting this November, we will have a standard version of the Classic Stripe umbrella available for under \$20. We also do custom orders for groups, companies, and individuals. CMF members get 15% off. You can contact us or order the umbrellas online at the website address above.

**Glidepath:** Tell us about your special Vimy Flight umbrellas.

**Bernada:** The Vimy Flight umbrellas were conceived as a fundraising initiative to help support the exciting project at the CMF. They are created to commemorate the 100<sup>th</sup> year of the Battle of Vimy Ridge. They are a limited collector's edition (100 only), with all profits going to the museum's Vimy Ridge Fund.

**Glidepath:** You are also actively involved as a volunteer at the museum?

**Bernada:** I am a huge fan of the museum. What it's doing and where it's heading. As with most of us volunteers. I tend to jump in and help whenever and wherever I can. Right now my focus is on the promotion of the Vimy Flight project. I love to create the buzz about getting the Pups to Vimy in 2017.



**These beautiful limited-edition Vimy Flight umbrellas would make a great Christmas gift!**

## Keep your Fork – The Pie is Coming!

The Airport Coffee Shop is now open, at the CMF Hangar.

Feast your eyes on this – one of their 60 different kinds of pies and cheesecakes.





## Your Editor's Rove – Purpose and Direction

***“We should feel a deep gratitude for museums. In a world of confusion and ambiguity, they lead us back to who we are.”***

**– Author unknown**

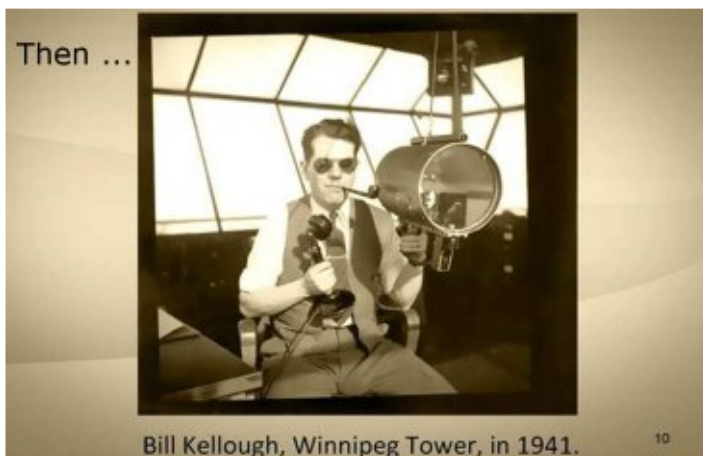
**Photo Credit: C. Deminchuk**



## Then and Now: The Tower – Who Controls What Where?

### Then: (Circa 1930s – early 1940s)

For the first generation of tower controllers, it was usually a one-man show. The tower controlled landings, takeoffs, and all arrivals and departures within its radio frequency area. Tower equipment consisted of a light gun, a 278-kilocycle radio transmitter, three or four short-wave receivers, and a Very pistol (flare gun). Many non-commercial aircraft were not radio equipped; the light gun was a key tool. The controller would flick a switch on the gun which generated a beam of white or green light that would signal to an aircraft that it was clear for takeoff or landing. The Very pistol was reserved for emergency situations such as warning a pilot who had forgotten to lower his wheels.



### Today: Precision Headsets with The Extended Computer Display System

The advent of radar extended air traffic control (ATC) beyond the tower. Glidepath was confused as to who controls what, where, so deferred to WestJet pilot Mark Wensrich: “Our first radio call goes to clearance/delivery. Only the busier airports have a clearance/delivery frequency. If they don't have one, then you get your clearance from ground control.

“Second call goes to ground control who control the aprons, taxiways, and maneuvering areas except for the runways.

“Tower controls the runways, and takeoff and landing clearances. They also control a cylinder around the airport ranging in size from three to seven miles from the centre of the airport (and from the ground up to 3000 ft. above ground level).

“Arrival and departure controllers transition the aircraft from the enroute structure – to and from the tower's control area. They operate a cylinder of airspace from 2200' AGL to as high as 18000 feet above sea level (usually lower, 12500' ASL) and the range is from 12 to 30 miles around the airport. In busy airspace, the arrival and departure controllers usually work outside the tower. Vancouver's departure/arrival controllers are based in Surrey.

“Enroute is broken into low-level (12500' ASL to 18000' ASL) and high-level controllers (18000 to 60000 feet).”

The Extended Computer Display System (EXCDS) runs on the Windows-based Integrated Information Display System (IIDS).

EXCDS allows controllers to enter the flight information of incoming/outgoing aircraft on-screen, such as type and size, altitude and identification codes. The information can be routed electronically between air traffic controllers via the touch screen technology. Like the fly-by-wire systems on modern aircraft, the purpose of EXCDS is to remove any potential for human error. The system ensures that controllers in the same or different facility are all looking at the same information.

The IIDS/EXCDS platform has also eliminated the space required for flight progress printers. Ironically, like his or her early counterparts, the controller is now closer to the glass and can better visualize takeoff and landing.

Photo credits: NavCanada

## TAILWINDS – Bits 'n Pieces from Around the Museum (and Beyond)

**We Love This – the Fly-In Passion Pit:** On June 3, 1948, former navy pilot Edward Brown Jr. opened a Fly-In Drive-In Theatre near Wall Township, NJ. There was enough parking space for 500 cars and 25 airplanes, which landed at a neighbouring airfield. The airplanes would then taxi to the drive-in's last row. Like any conventional drive-in, Brown's fly-in included a concession stand, restrooms, and plenty of privacy for, umm, watching the movie.



**They Never Say Never:** Kudos to the museum air, ground, and tent crew who worked another air show season. How hot was Abbotsford? This should give you an idea ...



**Airborne:** Our GM, Mike Sattler, was happy to finally fly something besides a desk as he was making the air show rounds with our S.E.5a replica. Mike also made the hop across Howe Sound on a chilly September day to support a fundraiser for the 858 Skookumchuk Air Cadet Squadron.



**Cocktail Hour:** How about the "Sully?" Two hits of Grey Goose vodka with a splash of water.

**Just the Thing For Aviation Geeks:** Those online aviation trivia quizzes are irresistible. They are fun and highly informative. Everything from "Airport Eponymophilia" to "Zeppelins." We liked "Fun Trivia" for their general aviation and WW2 aircraft quiz ... [http://www.funtrivia.com/quizzes/history/world\\_war\\_ii/ww2\\_aircraft](http://www.funtrivia.com/quizzes/history/world_war_ii/ww2_aircraft). Be sure to memorize your favourite categories so you can show-off your guest genius at dinner parties. Your hostess will be delighted!



**Hats Off to a Great Idea:** Doug Moan's signature hat has been permanently affixed to the museum's Harvard. "Doug loved to go for a loop and roll in the Harvard. He'd laugh so hard – I was soon laughing too." – CMF pilot Bill Findlay at Doug's Celebration of Life, January 2016.



**Deja Vu:** If you are a television late bird, you can catch reruns of The Twilight Zone on MeTV. In one recent episode (The Odyssey of Flight 33) Rod Serling's closing narration was particularly haunting because of its tragic similarity with Malaysian Airlines 370: "A Global jet airliner, en route from London to New York on an uneventful afternoon in the year 1961, but now reported overdue and missing, and, by now, searched for on land, sea, and air by anguished human beings, fearful of what they'll find. So if some moment, any moment, you hear the sound of jet engines flying atop the overcast – engines that sound searching and lost – engines that sound desperate – shoot up a flare or do something. That would be Global 33 trying to get home – from The Twilight Zone." (Narrative and photo from the original series.)

