

- May 2017 -



I finally took the time last week to drop in on the CYKF firefighters to show them Aerial One, my "fire plane".

President's Message

In spite of the photo above, my plane is back on floats again. It was a lot of fun landing on farm fields and grass strips, but it hardly compares to the enjoyment I get from being able to land on rivers and lakes as well. There are a few negative issues in flying amphibious floats including the added weight, slightly slower speed, not being able to take on the rough stuff like I do on the 27" tires, and of course the threat of an incident if I get complacent and don't have the gear in the right position, but the trade-offs are worth it to be able to land on water too.

The RAA members who regularly fly floats in the summer know what I mean, and others who are currently installing them or building them will soon find out the joy and versatility that is float flying! Whether a pilot has a water destination in mind or not it certainly adds a significant number of diversion locations, emergency options, or just adventure stops when you have amphibians installed.

Gary Walsh has told me a number of times that if he was not flying floats, he likely would have given up flying years ago. Lee Coulman had a much faster plane when he had the Warrior, but he sold it and kept the Searey. Once you've flown in a seaplane it's very difficult to give it up for a land-based only plane. I flew about 140 hours last year; well over 80 of those hours were water operations, and less than 10 were on the bush wheels. Now I can't imagine a time when I don't want the floats on during the May to October period.

I know some pilots are quite happy to fly from airport to airport, and the faster the better, but personally I can't imagine summer without the amphibians now. It may just be the right form of adrenalin-generating action for me or maybe I've been spoiled by float flying. Either way, I don't mean to discourage or disparage land plane operators; I'm just saying ... **I love being able to fly on amphibians!**

2017 is going to be a great year for KWRAA!

- Dan

Are you ready for a “Ramp Check” in 2017?

Many of us have never experienced a ramp check yet, but that doesn't mean it will not happen this year or in the near future. Ramp checks are generally only performed on business and commercial aircraft, but a Transport Canada Inspector can conduct a ramp inspection on any aircraft he/she suspects may be unsafe or has suspicion of a safety violation by the pilot of the aircraft.

Is your paperwork in order? Are your logs up to date? Are you still building, but want to know what documents you should be keeping to be ready for the day your project takes to the sky?

The ramp inspection checklist used by Transport Canada Inspectors for business and commercial aircraft and operators is available on the Transport Canada website at: <https://www.tc.gc.ca/media/documents/ca-publications/sfo11b.pdf>. I have been unable to find a separate one for personal aircraft, but I believe we can safely extrapolate the required information from this form for our purposes.

Commercial and Business Aviation Inspection and Audit (Checklists) Manual															
SFO-11b Ramp Check															
Inspector		Date (YY-MM-DD)		Location		A/C Type/Flight Number		A/C Registration							
Company				Registered Owner											
Pilot-in-Command				Licence Number/ Type Endorsed		Medical Valid to (YY-MM-DD)		PPC/Instrument Valid to (YY-MM-DD)							
Co-Pilot				Licence Number/ Type Endorsed											
Flight Attendant/Passer <input type="checkbox"/> Yes <input type="checkbox"/> No				Name		Current		<input type="checkbox"/> Yes <input type="checkbox"/> No							
<i>Documents Onboard Aircraft</i>															
		Yes		No		Amendment No./Date		Yes		No		Amendment No./Date			
Aircraft Flight Manual								Operations Manual							
Cabin Attendant's Log								Radio Licence							
Certificate of Airworthiness								Snag Deferrals							
Certificate of Registration								Weight and Balance/Load control							
Journey Log Book								SOP/Company Ops Manual							
Minimum Equipment List															
Baggage Check (Tie Down/Straps, Pallets)															
Cabin Check (Seatbelts, Safety Feature Cards, Emergency Exit Signs, Placards and Opening Instructions, Carry-on Baggage Restraints, Galley Restraints, Closet Areas, Cargo Areas, Accessibility from Cabin)															
Emergency Equipment (First-Aid Kits, ELTs, Fire Extinguishers, Oxygen Cylinders, Life Vests, Life Rafts)								Dangerous Goods		<input type="checkbox"/> Carried <input type="checkbox"/> Authorized					
Notes															
Follow-up Required:															
Inspector's Signature _____ Date _____															
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List of items that could be checked:

Pilot:

- Licence (Type, ratings, endorsements, training ie: recency)
- Medical (Category, dates valid, conditions for flight - ie: glasses required)
- Radio Operator's Certificate? (In Canada this is an Industry Canada responsibility)

Aircraft:

- Certificate of Airworthiness
- Certificate of Registration
- Flight Permit (if fulfilling the conditions for a special flight or flights – ie: climb tests)
- Journey Log (which may include the maintenance log for amateur-built aircraft)
- Minimum Equipment List (in some cases a copy of the equipment approval may be required – but primarily in the US only)
- Operator's Manual
- Weight and Balance Calculations
- Snag Deferrals (ie: equipment out for repair... including placard advising of snag)
- Baggage tie-down straps or cargo net
- Cabin Check including: seatbelts, placards, checklists, aeronautical charts, CFS, etc.
- Emergency Equipment including: first aid kit, ELT and battery, fire extinguisher, life vests if seaplane or flying over water, oxygen system if so equipped.

Items not to be on board:

Unless you are a student pilot or flying off the initial hours on a Recreational permit, your pilot logbook should be kept at home or other safe location, not on board the aircraft.

Dangerous goods should not be transported on board an aircraft unless they are authorized by the Minister of Transportation.

Safe Flying!

- Dan

Passenger Safety Briefings

As recreational flyers, we tend to spend a lot of our flight time solo in the cockpit. When we do have occasion to take up a passenger for a flight, we can forget that they are not as comfortable with flying as we are. The passenger briefing is a very important part of alleviating some of the fear or apprehension they may have. It also serves to familiarize them with some of the equipment and features of the aircraft prior to flight and make the flight as comfortable and enjoyable as possible.

The first time I took my wife up in a plane, over one hour into the flight I noticed she had thrown her jacket over her legs. When I asked if she was okay, she said she had been chilly for quite some time but didn't want to bother me about it and figured it must be normal. I realized at that moment that I had not told her about the environmental controls during the pre-flight passenger briefing. I closed the vent and she warmed right up, but I learned a valuable lesson in the process.

I looked around for a good checklist of items to cover during the briefing and found one that I liked, but wanted to personalize a bit. I'm not sure where the original came from, but my version has been modified significantly. I even dressed it up with a photo my wife took from the Highlander of the north shore of Lake Erie... at Port Bruce, looking east.

You may find something similar on the pre-start checklist for just about any small aircraft you fly. You are required by Federal Regulations to brief your passengers on how to fasten and unfasten seat belts, but the "complete" passenger briefing should include far more. A comprehensive and professional briefing should be conducted for safety reasons so I prefer the acronym "SAFETY".

"S" is for:

Seat Position – My Highlander has seats that adjust on a rail to accommodate different leg lengths, so I try to make my passenger comfortable by setting that first.

Seat Belts – Once in position, I make sure the passenger knows how to adjust, fasten and

unfasten the seat belt and shoulder harnesses and advise them to keep them fastened while the aircraft is in motion.

Smoking – Smoking and alcohol are prohibited in aircraft, so I make sure my passenger knows beforehand.

"A" is for:

Air Vents – Air vents are the next item to include in your passenger briefing. Show your passenger(s) the air vent location and operation. For lack of a better place, this may also be a good time to mention the oxygen system if your aircraft is so equipped.

Air Temperature – Besides fresh air it is often desirable to warm up the cabin a bit so you may wish to show the passenger the cabin heat controls, but it may be best to tell them to let you know if they are too hot or too cold, so that you can make an environmental adjustment, unless your passenger has experience in small aircraft.

Action in Case of Discomfort – When the ride gets bumpy from thermals or strong winds it is common for passengers to experience nausea. Personally, I take a direct approach on location and use of airsickness bags. If you believe that power of suggestion could trigger queasy passengers, you will still want passengers to know that they should tell you right away if they feel uncomfortable for any reason.

"F" is for:

Fire Extinguisher - Fires can, and do, occur in small airplanes, especially with engine starts. Show your passengers where the extinguisher is located, how to unlatch it from its mount, and how to use it in the unlikely event of a fire.

First Aid – Advise the passenger that in the unlikely event it is required, there is a first aid kit on board and tell them where it is located.

Feet and Legs – Advise your passenger to keep their feet clear of the rudder pedals and legs clear of the control column/ stick.

"E" is for:

Exit Doors – Advise them how to open and close the exit door and how to secure it for flight. Also advise them during the briefing that the gathering point will be towards the rear of the aircraft (to avoid the propeller). In the event

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of an emergency, oversee the passenger evacuation before leaving the aircraft yourself.

Emergency Survival Kit – Advise that in the unlikely event of a forced landing, there is a survival kit on board and describe its location

ELT – Advise that there is an emergency locator transmitter on board and that it activates automatically during a crash.

“T” is for:

Traffic – Advise that other aircraft are known as traffic and that the job of the passenger is to scan for and spot traffic. If they spot anything, notify you of the location of that traffic.

Tell What to Expect – During your preflight planning you should have gathered enough information to tell the passenger what they can expect once you are airborne. Wind and weather can create some turbulence and passengers will appreciate knowing beforehand if you are expecting a bumpy or smooth ride based on current conditions.

Talking – Advise the passenger whether it is alright to talk when airborne. Advise that you expect a sterile cockpit during taxi, take-off and landing. If you inform them ahead of time that there may be a lot of radio communications during those times it helps to keep them from disturbing you during a critical phase of flight.

“Y” is for:

Your Questions - Advise the passenger that

now is a good time for any questions they have before taking off. Once airborne it may be difficult to demonstrate any items mentioned in the briefing if they didn't fully understand.

Some passengers may be intimidated by flying in a small aircraft or embarrassed to ask what they think might be a “dumb” question, so look for any signs of concern or confusion. This is your opportunity as a GA pilot to reassure a nervous passenger, or even to encourage a potential future aviator's interest in flying.

Lastly, when the passenger briefing is complete; show the passenger the headset volume control and put on headsets just before engine start. Once the engine is started, set the intercom/radio volume to establish clear communication between you before departing.

A thorough passenger briefing will make everyone feel better about flying... even you as the pilot will feel better knowing that your passengers know what to expect and how to behave in your aircraft! When flying with another pilot in the right seat, I dispense with some of the obvious items on the list.

Here is a link to a full size copy of my [Passenger Safety Briefing](#) on our RAA chapter website. Feel free to print and use it as-is or modify it to suit your own needs as I did.

Happy Flying!


- Dan

Passenger SAFETY Briefing

(Before Start-up/Warm-up)

S	Seat position adjusted and locked in place Seatbelts fastened for taxi, take-off and landing Smoking and alcohol are prohibited in aircraft
A	Air vents (location and operation) Air temperature controls (heater knob operation) Action in case of passenger discomfort
F	Fire extinguisher (location and operation) First aid kit (location)
E	Feet and legs clear of rudder pedals & controls Exit doors (how to open and how to secure)
T	Emergency survival kit (location and contents) ELT (how it works, location and operation) Traffic (scanning, spotting, notifying pilot)
Y	Tell what to expect based on weather and wind Talking (minimized during taxi, take-off and landing)
Y	You have any questions?

* Show the passenger the headset volume control, put on headsets, and set intercom volume just before engine start.

A graphic for a passenger safety briefing. It features a background image of a small aircraft flying over a body of water and a shoreline. The text "Passenger SAFETY Briefing" is overlaid in large, bold, black letters. The word "SAFETY" is the largest and most prominent.

Full size copy available on the RAA website [here](#).

The Leading Edge

Thanks for the feedback on last month's article on Airborne Wind Energy Conversion Systems. No one knows when or where they will be deployed, but given the economics of this technology, there is little doubt AWECS will be

deployed when the legislative barriers are cleared for large scale AWECS wind farms. I will keep you posted as this technology develops over the next few years.

- Dan

Lithium Battery Protection Circuit (Revised)
I know I said I would let you know how the bypass relay worked out in next month's newsletter, but I've been too busy to try it yet.

Please forgive me for not getting it into this edition. In the meantime, I'm glad I installed a bypass switch into the initial design.

- Dan

Upcoming Events in 2017: (Highlighted lines are KWRAA Events*)

June 10	-	KWRAA Fly-In at Cam Wood's in West Montrose	INFO
June 23-24	-	COPA National Convention in Kelowna, BC	
July 15	-	KWRAA Fly-In at Tom Shupe's in Mount Forest	INFO
July 24-30	-	Air Venture Oshkosh in Wisconsin	
July 29	-	KWRAA Fly-In at CPR3 near Teviotdale/Palmerston	INFO
August 5	-	Gathering of the Classics in Edenvale, ON	
August 12	-	KWRAA Fly-In at CMZ2 – Metz/MacPat Field in Arthur	INFO
August 18-20	-	UPAC Convention – Lubitz Field, Plattsville ON	
August 26	-	Aviation Fun Day at CYKF	
August 30	-	Rotary Charity Airshow in Brantford, ON	
Sept 2-4	-	Canadian International Air Show – CNE Grounds	
September 11	-	September Meeting at 7:30 in the Cadet building at CYKF	
September 16-17	-	Air Power Demonstration at London International Airshow	
October 16	-	October Meeting at 7:30 in the Cadet building at CYKF	
November 13	-	November Meeting at 7:30 in the Cadet building at CYKF	
November 24 (TBA)	-	KWRAA Christmas Party in lieu of a December meeting	

* KWRAA events are fly-in and/or drive-in (Please advise the host in advance if you plan to attend whenever possible.)

Executive Contact Information:

KWRAA President:	Dan Oldridge	(519) 651-0651 oldridge@golden.net
Vice President:	Clare Snyder	(519) 886 8032 clare@snyder.on.ca
Secretary:	<i>Position Open</i>	<i>(Looking for a Volunteer)</i>
Treasurer:	Mike Thorp	(519) 338-2768 mhthorp@hotmail.com
Director ACT:	Gunter Malich	(519) 747-5066 gunter.malich@gmail.com
Director AFS:	Lee Coulman	(519) 664-8217 lee.coulman@gmail.com
Director FSE:	Mac McCulloch	(519) 831-0967 macpat@live.ca
RAA Canada:	Gary Wolf	(519) 648-3030 garywolf@rogers.com

Rotax Heat Monitor Strips:

Mac has a number of Rotax Heat Monitor Strips that can be applied to sensitive areas to monitor for extreme heat readings. They are presently being recommended by Rotax to monitor the ignition modules. He is offering them individually for \$15 each incl. HST. or two for \$28 incl. HST.

Contact: Mac McCulloch at macpat@live.ca

Be sure to check out the KWRAA for more information at: www.KWRAA.net