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Recreational Flyer

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RAA
RECREATIONAL AIRCRAFT ASSOCIATION
RÉSEAU AÉRONEFS AMATEUR CANADA

From The President's Desk

Gary Wolf

FLY-INS vs AIRSHOWS

It is definitely fly-in season now and it is important for chapters to understand that the RAA Chapter Liability policy provides coverage when the event is a Fly-in, but not if it is an Airshow. At a Fly-in the pilots arrive and depart using proper circuit procedures, and aerobatics and other competitions are not encouraged or countenanced.

Does your chapter Fly-in have some pilots who beat up the field or perform extreme maneuvers in the circuit? These worthies turn the event into an Airshow, and if the chapter turns a blind eye it can affect their insurability. It is the responsibility of the chapter rep to have a little chat with these pilots to explain how this affects the chapter's coverage and their responsibilities to Transport Canada.

A Fly-in does not require reporting to Transport Canada, but an Airshow definitely does. Among the differences are that Transport will require greater setbacks between the runway and the crowd, and there will be Notams issued.

MD-RA INSPECTOR RECRUITMENT

MD-RA is now recruiting applicants to become Inspectors of Amateur Built aircraft. Details in both official languages are posted in he News section of the www.raa.ca website. If you wish to apply please call the MD-RA office at 1-877-419-2111 or go to their www.md-ra.com website for email addresses.

WIND TURBINES AND AIRPORTS

Across the country many airports are coming under pressure from wind turbine farms, and it appears that aviation has no priority even if safety is being compromised. Ernie Weightman is an RAA Collingwood member who has sent around an email explaining that plans are afoot to build a large wind farm adjacent to that busy airport. To stop something like this takes a great deal of lobbying and therefore a lot of money. COPA has become involved in these efforts and they are soliciting donations to further their lobbying efforts across the country. Please consider making a donation to assist in their work. www.copanational.org has their posting on this matter. Alternatively you could start asking questions of your MP or MPP. Some rural strip owners have built small houses at the ends of their fields to ensure that the turbines will be at least 500 metres away, not inexpensive but this does ensure some separation.

US AMATEUR AIRCRAFT REPORT

There has recently been an NTSB report issued in the US that is very critical of their amateur aircraft for having a high accident rate. Fuel systems and flight testing requirements and procedures come in for special mention. NTSB is recommending that the FAA require a fuel system test, which is coincidentally very similar to Canada's. The NTSB also recommends that during the flight test phase, a second pilot be allowed in the plane when this is necessary for test purposes, again something that is already allowed here.

It is important to note that in the US their A-B program is self-certified, there is no precover inspection, and the final inspection is primarily of the builder's log, and only occasionally of the aircraft itself. Canadians who buy US A-B aircraft frequently find that before a newly purchased plane can be registered here they must do a lot of work to meet the requirements of Canada's A-B program.

SOME LIGHT SPORT PROGRESS, AT LAST

Immediately after the FAA announced their Light Sport category, RAA provided to Transport Canada a path by which this category could be fast tracked into our regulations as a subset of Advanced Ultralight. This led to a series of meetings of the various aviation associations and Transport Canada to revise our regulations to incorporate this category and to address loose spots in the regs governing the existing non certified categories. Immediately after the Working Group issued their report Transport Canada underwent some changes that shelved this document. Their priorities became their own downsizing, the

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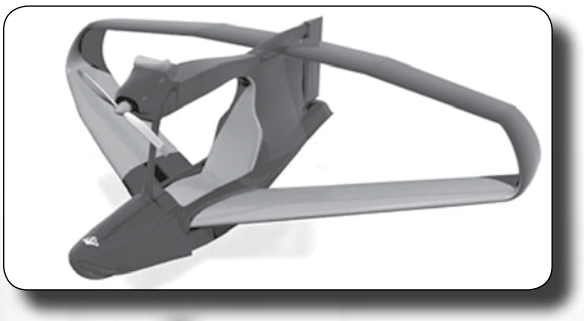
features



columns

A Cessna Bird Dog 0-1 at Chapter 85's July 2011 Fly-in.
On the cover: Steve and Kathy Sutton's Glastar.

George Gregory

Gone South

Flying with 41 Squadron, South African Air Force / Part 2 by Raymond Firer

AS WE WERE DESIGNATED 41 and 42 Army Air Reconnaissance, we also had to learn to direct artillery. After completing the theoretical course, we headed out to the veld to try our hand at doing just that from a forward observation post on the ground, somewhere between the guns and the target area. After deciding where the "enemy" was, we would call for one shot. Watching to see where that shot landed, we would then direct the gunners to make alterations to their aim, and close in on the target until a direct hit was scored. Then it was time to try this from the air. To do this, we would fly a loose figure eight, the axis of which was in the heading of the intended target, calling for a shot as we turned into the direction of the target. Not as easy as it sounds, partly as we had to use Army radios, as well as our normal aircraft sets. These bulky Army sets would be strapped to the right hand seat, with the hand set on our lap, and we had to use Army jargon, which included saying "over" each time we had finished talking, and "over and out" at the completion of a conversation. All this whilst keep in touch with our ATC.

We also had to be rated for night flying, and how well I remember my first efforts at landing in the dark. I managed two landings quite successfully, and I suppose that I had become a little overconfident. Coming in for that third landing, I rounded out too high and froze. There we were at about twenty feet, full flaps, trimmed right back, stick all the way into my stomach, stall warning blaring, the instructor shouting "You're too high, you're too high!" Fortunately the nose didn't drop, and we slammed onto the runway on all three wheels, and bounced back into the air. This jolted me out of my stupor, and I jammed the throttle wide open, shoved the stick forward, and we were flying again. I slowly raised the flaps, and trimmed forward. After completing another circuit, I landed a perfect three pointer but we taxied in to have the aircraft checked out. Fortunately there wasn't any damage, and I completed my night flying training without further incident. Another aspect of night flying that was rather exciting was working with a "limited flarepath". This was simply two jeeps parked at an angle to each other, so that their headlights crossed at the beginning of the runway, and one man with an Aldus lamp at the far end. We practiced landings and take-off with and without landing lights, and were cautioned not to follow the landing lights down, as was the tendency. And I really enjoyed cross country flights

To this end we would "volunteer" four soldiers from the Gunnery school in full kit, to fly with us, warning them that if they felt the need to throw up, they had to do so in their helmets.

at night, because it is so peaceful up in the air in the darkness, with the lights of the towns and farm houses dotted in a sea of black.

There were two other scary incidents during my wings course. The first was my engine overheating. At least that is what I thought at the time. The indicator had crept up well into the red. I opened the engine cowl, throttled back, and began a shallow dive but this didn't solve the problem, so I radioed Potchefstroom for a direct approach and landing, explaining why. I was cleared for that, and soon was over the fence. As the aircraft touched down, the indicator flicked back into the normal range, so it was probably just an instrument glitch but I decided to return to the hard-stand, and have the Erks check out the instruments. They couldn't find anything untoward, and this was put down to one of those little gremlin problems.

THE SECOND INCIDENT could have had somewhat more severe repercussions. I was doing circuits and bumps in preparation for our wings test, when, on downwind, a civilian twin engine Aztec flew directly through the circuit just ahead of me. I jerked the throttle closed, which fined out the prop, causing it to act as an airbrake, and although the stall warning began to beep, I was able to open the throttle almost immediately after that and keep flying. The Aztec had passed not more that 100ft ahead of me, and I was able to make a note of his registration, which I passed on to our ATC, who, in turn, filed a complaint to the Johannesburg controllers, who were responsible for the Transvaal airspace. I was informed sometime later that the pilot of this aircraft had been grounded for six months.

As part of our Wings test we had to do an all-up-weight test. To this end we would "volunteer" four soldiers from the Gunnery school in full kit, to fly with us, warning them that if they felt the need to throw up, they had to do so in their helmets. After a hairy downhill take-off, I put the aircraft through its paces doing stalls, incipient spins, max-rate turns and a simulated forced landing. Then it was time to land. Downhill! The aircraft floated for quite some way before settling gently onto the runway. And no vomit to clean up, I'm pleased to report.

I am happy to say that I passed the wings test without any problems, and so did my two fellow students, (See picture 8) and as we were only three, our wings parade was a very low key event. It was held in the Officer's mess committee room, and besides the three of us, our CO was there, as well as the CO of the base, the CO of 41 Squadron and our three instructors. Our wings were presented to us by the Chief Flying Instructor of the Air Force. This was one of my most memorable moments.

Just an aside: John, one of the other two candidates, came to this wings course with more than 2000 hours under his belt, and was a commercial pilot and instructor, yet he still had to pass through all the same hoops as the rest of us. The humorous side of this was that often, after completing his required time with his military instructor for the wings course, they would change seats, and

he would put them through their paces for their commercial Licence.

After receiving our wings we returned home to our civilian jobs, only joining the squadron the following year, at the annual, month-long camp. Where, as squadron pilots, we were expected to fly patrols, transport VIPs, and trained for Med-Evac duties. This last involved removing the right side door, and all the seats except the pilot's, to allow for a stretcher and a medic. Flying without a door is rather noisy, and as we didn't have head sets, listening to radio calls was a problem but we managed.

IN THE BUSH, we made do with some very crude landing strips, sometimes just a fairly level stretch of ground which had been cleared of loose branches and rocks. Fortunately the 185 was a robust aircraft. But at one such strip, the approach was over a set of high voltage cables, making for a hairy landing. We had to come in very steeply, and round off suddenly but fortunately we didn't have any untoward incidents.

During my time with the squadron, there were, however, three deaths, all from crashes into similar cables. In each case it was pilot error. Two of the pilots were supposedly practicing low level flying when they did a "beat-up" on some farm workers. On pulling up they flew directly into these high-voltage cables, which were strung on pylons separated by almost half a Kilometer, and the aircraft crashed just a short distance past the wires, bursting into flame. The third incident was even more bizarre. This pilot had been assigned the task of a radio relay station, and should have been circling at 8000 ft. He too crashed into high voltage cables strung across a big dam, and drowned.

One other incident which could have had a bad ending was at a camp at the height of summer. The medical wisdom at that time included replacing lost electrolytes by swallowing a huge salt tablet each day. This thing was the size of a Loony and three times as thick. Often we would pretend to take this tablet, but would discard it as soon as possible. One pilot, then in his thirties, had just swallowed this medication before flying, and suffered a heart attack on take-off. Fortunately he was with an observer from the squadron, who was able to take over and bring the flight to a safe conclusion., and the pilot happily survived. After an court-of-inquiry by the Air Force, salt tablets were taken off the schedule.

A few years into my stint with 41 squadron, we participated in a very big military exercise in the Northern Transvaal.

Working with the Infantry, Artillery, Tank Corp and all the ancillary branches needed for an army, we covered most of the tasks we had been trained for, and all this over some of the roughest terrain, which, at low level, in the heat of summer, made for some really bumpy rides. But it had its bright side. Patrolling close to the boarder of the Kruger National Park, we were able to watch elephants, rhino, and if we were lucky, lion. We even crossed the Limpopo into Rhodesia (Zimbabwe) on the odd occasion, even although this was strictly forbidden.

Part of this operation took place close to the traditional Kraal of the Northern Sotho Queen, and we were expressly forbidden to overfly this area, as it would cause an almost international incident. One day, flying quite close to the boundary we had been given, I noticed that we were drifting towards this Kraal. The wind must had sheared drastically. I executed a rapid turn and managed to avoid any problem but it was close, as I could see the huts in the Kraal.

Speaking of Rhodesia, our squadron had been involved in operations in that blighted land whilst I was doing my initial training. The aircraft used there were in camouflage livery and didn't have any identifying markings. They were purportedly on "Police" duty (opposite page, right).

On another exercise, I was given the task of measuring several bridges along a particular river. This was achieved by flying along the bridge at about 50 ft, at a "low-slow-safe"speed, that is with full flaps and just above the stall, and using a stop watch, timing how long it took to pass over the bridge. Then we would calculate the length of the structure from our

estimated ground speed.

After measuring four bridges, it was time for me to head back to camp but I suddenly realized that I was somewhat lost. Not lost. Pilots are never lost, right? Just unsure of their position. Well I certainly was uncertain of my position once again, and I couldn't find any positive landmarks to orient myself. Just then I flew over a rail line. Rail lines have stations, so I decided to follow this one, which I did, and it wasn't too long before I saw a station ahead. Dropping even lower I slowed down to read the station nam: Mafeking! I was in Bophuthatswana. No wonder I couldn't find any landmarks. I was completely off the map. At least I now knew which way to turn. I headed East, and was soon back in South Africa and on my map. After that it was easy to find my way back to base, where I reported my little digression to the Adjutant, who poo-pooed the whole incident.

Near the end of this camp, I was assigned as an observer on a routine patrol. On take-off black oil suddenly sprayed across the windshield blinding the pilot. I was able to say those magic words: "I've got her" and took over the flying, from the right seat, for the first and only time. I informed the ATC, such as it was in those limited circumstances, made a low circuit, and landed safely. It was discovered that the oil filler cap had come off. It just shows that it is the pilot's responsibility to make a thorough pre-flight check.

BETWEEN CAMPS, I flew from the Cape Aero Club each weekend. The club had, by this time invested in two Piper Cherokees, (PA 29) not an aircraft I enjoyed all that much. It was far too docile. I felt that the landings were more like driving a car onto the ground but I did have one hairy episode in this aircraft. If you recall, the anti-aircraft training school was situated at Youngfield. Their practice ground was on the coast of False Bay, to the South of the airfield. One Saturday morning, I was out flying quite early and, skimming along just off the beach heading East, I rounded a bluff banking to port, and suddenly I was directly in the line of the guns. Fortunately they hadn't begun their exercise. I flicked to the right and shot out to sea, and away from those open barrels. On return to the club, it was discovered that the warning of an impending gunnery shoot hadn't been posted. I suppose that someone was severely reprimanded.

On take-off black oil suddenly sprayed across the windshield blinding the pilot. I was able to say those magic words: "I've got her" and took over the flying, from the right seat

About half way throughout my stint as a 41 squadron pilot, the Air Force took over responsibility of all military flying, and we had to change our rather mixed bag of Army uniforms for the Air Force Blue, but we were allowed to retain our metal wings.

Time flew by, if you will excuse the pun, and my ten year obligatory service was over. By this time I had found another calling which gave me almost as much pleasure as flying. I was working as a professional photographer, and I decided, unwisely as it later dawned on me, to give up the squadron and flying.

SO HERE I AM, thirty-something years later, sorry that I didn't continue with a career in the Air Force, or as a commercial pilot. But my love of flying hasn't abated, and when I had the opportunity to go up in a light aircraft once again, I jumped at the chance. Jill Oakes took me up a few months ago, as a reward for answering the call on the CBC radio to say why I thought I should be given this chance. Sitting in the front seat, smelling all the old familiar smells of a small aircraft. Start-up, taxiing out; lining up with the runway; that surge of power pushing one back into the seat, and that unbelievably magical moment when the wheels leave the ground, and one is airborne!

Nothing can beat that.

ZENITH CH750 REAR BULKHEAD REINFORCEMENT KIT

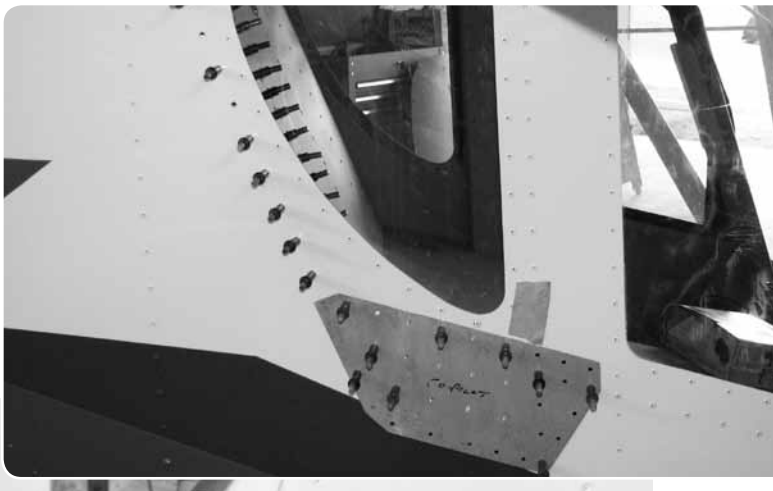
AS MIGHT BE EXPECTED, a Zenith CH 750 STOL can experience a lot of rough field operation. This particular example is one of the lighter Version 1 kits and its passenger compartment rear bulkhead began to crack from one of the top corners. The later Version 2 kit has a higher allowable gross weight and more reinforcement in this area.

The first symptom was that the owner heard oilcanning of the panel when taxiing on rough ground, and shortly a crack began in the top corner and began progressing radially towards the centre of the panel.

Zenith has a retrofit kit 75-FA-10 which may be added to reinforce the cabin's rear corners and the area below the rearmost windows. Zenith supplied the upgrade pieces gratis and the owner began drilling out the rivets that attached the rear bulkhead to the cabin sides. A predrilled channel section was clecoed to each rear side of the bulkhead and then the owner reached up through the tailcone access panel to backdrill the bulkhead.

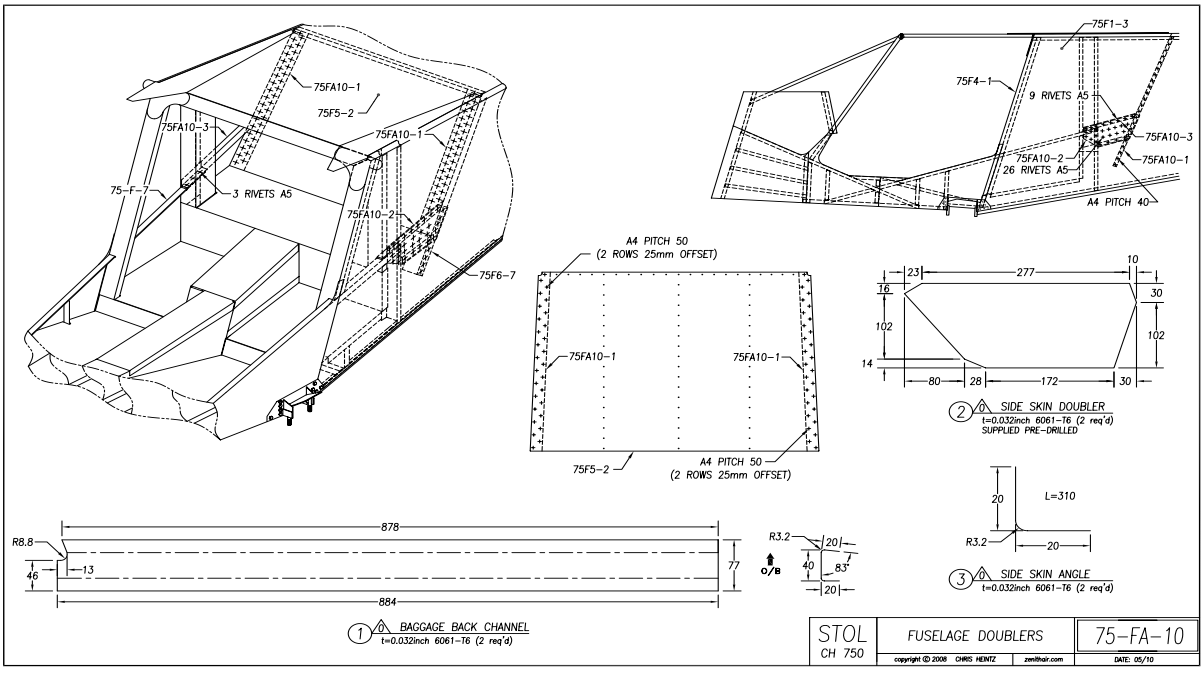
The area under each rearmost window was reinforced by a flat panel and a horizontal piece of angle, both riveted to the cabin side. The flat panel may be fitted either to the outside or the inside of the fuselage, and since this plane had already been painted the owner opted to mount it inside.

The owner then flew the plane home and upon landing at a rather rough strip he



noticed that the oilcanning had disappeared. Owners of Version 1 CH 750's are well advised to retrofit the 75-FA-10 kit.

Above, left to right: first symptom was oilcanning, and then the crack began. Above, the factory-drilled side reinforcement was used as the drill jig, and was later installed on the inside of the cabin. Above right, the fuselage must also be drilled for a channel section to reinforce the rearmost cabin corner.
Right: An angle section is added below the window to prevent oilcanning in that area.
Opposite, far left: Almost done. All that remains is to paint the heads of the new rivets.



Learning How to Land

Lyncrest hosts a seminar for Frequent Fliers / By Jill Oakes and Rick Riewe

AT A FLY-IN luncheon hosted by the Springfield Flying Club, Colette Pierce, a frequent passenger from Beulah Manitoba (near the Saskatchewan border) mentioned that she and 3 other women were learning how to land their husbands' planes.....just in case the pilot in the family became ill and the passenger needed to know how to get the plane back on the ground. This course was planned half a year before the recent news item about a woman in the USA who landed their family plane when her husband had a heart attack in flight.

The Winnipeg Area Chapter of the Recreational Aircraft Association with the Springfield Flying Club offered their first Learn to Land course this Spring with Harv's Air instructors, Aaron Doherty and Luke Penner. Plans began last October by contacting several insurance companies to confirm they were able to support this initiative by adding Harv's Air Ltd to each aircraft owner's insurance policy. They were thrilled with the idea and are planning to use it as a model…sort of like wearing a helmet when we ride a bicycle! At first aircraft owners were dubious; were we OK with having two young (but extremely experienced instructors) fly our aircraft knowing they had little or no experience on type? Some aircraft owners figured it would be wiser just to let their frequent passengers take Ground School – no in-air flight training. Harv's Air developed and tested a course including 6 hours of Ground School plus 4 hours of in-flight training in the family plane with the Student sitting in the Passenger's seat – the same seat they would typically sit in if they went flying with the family pilot.

By February about 14 people had signed up for the full course – wives and husbands, girl and boy friends, and neighbours. Several thought they would just take the Ground School. By the end of the course 18 Students completed the full course and 45 people attended the Ground School! A few days before in-flight training began Luke and Aaron arrived to get checked out in our airplanes. We pilots were pretty nervous - this was the first time we had sat in the passenger's seat of our own plane, and the first time anyone else had flown the plane! Planes included ultralights (RANS, Chinook, Land Africa), tail draggers (Canuck, Citabria) nose wheels (Cardinal, RV plus two C172s)! Luke and Aaron caught on to each of these aircraft immediately. As Gilles Frichette, owner of the RANS said, "It was as if Luke was wearing my plane; he flew it better than I and this was the first time he had ever been in an ultralight!" Harv's Air has the widest variety of aircraft in their fleet in Canada – including a high performance Pitts Bi-Plane which fly-in organizers can

invite to local fly-ins! Luke and Aaron brought back photos and told the other instructors at Harv's Air about the aircraft they had the opportunity to fly! Soon aircraft owners who weren't sure about letting someone else fly their plane joined the course and gave their partners the opportunity of a lifetime to learn from two of the best instructors.

By February about 14 people had signed up for the full course

Ground school was offered over two evenings. On the first evening people entered looking terrified. Wilma Woods summed up a common feeling: "I'm terrified but the alternative is even more terrifying!" Aaron Doherty put a lot of thought into the ground school curriculum and was able to put himself into the mental space of the audience. He quickly won the audience's confidence, transforming faces filled with fear into individuals who had bonded together supporting and encouraging each other in their determination to accomplish at least the first step towards learning to land.

In-flight training was scheduled for Mondays, Wednesdays, Fridays and Saturdays. Aircraft owners got their respective planes warmed up, completed the walk around, and ensured that there was sufficient fuel before each lesson began. After completing some air work the students learned approaches and by the fourth lesson almost everyone was doing circuits! As Luke and Aaron said repeatedly; "These students are working really hard when they are in the cockpit and then in-between lessons they are envisioning the approach, asking their partners questions and reviewing what they had learned to date. They are really serious students and determined to overcome some of their fears."

The results were impressive! Touching the controls for the first time, learning to turn, climb, descend and then actually doing approaches and finally practising touch downs…each step was celebrated with hugs, cheers, and enthusiastic chatter. The airport was alive with the thrill of flight!! TV, radio and newspapers came out to capture some of the magic, broadcasting the students' accomplishments locally and nation-wide! The local sailing club has now incorporated a similar course for partners of sailors! Let me know if you hear of other applications!

THE RAA AND SFC extend our heartfelt congratulations to each of the following Students who graduated from the *Learn to Land* course:

Edith Bazin-Chromiec
Doris Essenburg
Martin Laing
Barclay Larner
Ashley McIntosh
Diana Malbranck
Boris Minkevich
Irene Moodie
Sheila Moodie
Karen Rasmussen Oke
Marion Pinchbeck
Jean Podaima
Donna Pronishen
Brigitte Smutny
Darlene Stewart
Rick Riewe
Heather White
Wilma Woods

Here are some of their and their partner's comments:

Ground School

While discussing the difference between "PAN..." and "MAY DAY..."

Students whispered to each other during Ground School, "...we'll be saying "@#&! , @#&! , @#&! " - anyone hearing will get the message!"

Before 1st Flight

Donna Pronishen walking over to their family's Citabria with Marcy from CBC:

"Come and see my instrument panel...(at the Citabria's door) Well, I

TV, radio and newspapers came out to capture some of the magic, broadcasting the students' accomplishments locally and nation-wide

haven't had my first lesson yet and I don't know how to open the door! It is defintely NOT like a car..."

"I am going to fly!"

FIRST FLIGHT – AIR WORK

Wilma to Marcy CBC Radio - "...don't bother with that spinny thing, just tell me left or right....I don't get North South East and West... I'm going to label the instruments...'turn'... 'climb' ...so its clear which one I'm to look at for each step." [By the next hour Wilma had the Directional Gyro aced!]

"To turn right, my right arm waves uncontrollably in the cockpit and then slowly my left hand gripping the control stick starts making the turn..."- Diana Malbranck

"This is better than Disneyland!'- Brigitte Smutny with CTV

After flying I went home and had a hot bath - my whole body was tired...to align the plane up with the runway my body would go into contortions until finally my arm would take over on the control stick and actually moved the plane into position!" - Edith Bazin-Chromiec

Irene Moodie after first lesson: "I'm really excited to be getting comfortable making turns and descents, and will be satisfied if I am able to just control the airplane in the air....I don't need to learn to actually land as Peter loves flying so much he'll never die flying, he'll die doing chores!" (Irene did learn to land the Fleet Canuck).

Diana during the first or second lesson: Aaron said 'You're flying south right now, make a 180 degree turn to the North." I blurted out "Are you serious, do you know how long it's going to take to turn this plane around that far?" (Diana did master turning and is just waiting for the day she goes flying with her husband, Rick, 'here let me fly, I'll show you how to turn this plane!") - Diana Malbranck

APPROACHES AND CIRCUITS

"The first day I went up it was really windy, the next day the intercom failed and the third day we were dodging rain and reporting showers to Luke who was up with Marion in the RANS. Today the weather was perfect and I had no excuses left - I still had trouble keeping it aligned with the runway to land!" Jeannie Podaima

Jeannie Podaima, during an approach over a farmer's field - "Am I landing here?"

Marion after doing circuits the first time: "It was really busy - altitude, attitude, alignment, climb, turn, get the wings level, make a radio call...what's my airplane name? and, oh yeah the runway number, turn again, descend to land and squeeze in a check for birds...I don't think I breathed til I was on the ground..." [Gilles - "She sounded like an Air Canada pilot on the radio!!" Marion Pinchbeck.

"Luke said and did exactly what Jill's been doing with me for 30 years; only I listened to Luke ...and finally realized that I really have been landing the plane!" Rick Riewe

"I do everything fast - even taxiing...I find it the hardest thing to catch on to!" [By the next hour of full stops and taxing back into position for the next circuit, taxing was also mastered!] Edith

Above and opposite: some of the participants in the Learn to Fly seminar. A great example of the aviation community adding value to the flying experience. Remember the first time you realized you could land an airplane safely?

Bazin-Chromiec.

Landing

I have one thing that stands out in my mind, even today still! When Luke and I did the first landing together, he asked me how I felt. I told him I was just very tense. He said to '.... breathe....' and I realized at that point that I probably wasn't breathing! I was probably holding my breath from the time we called the final turn, to the time we took off again! I kind of chuckle to myself when I think back on that, and right now I'm kind of missing it already. - Marion Pinchbeck"

If something happens, I'm in control and I know what to do," Smutny said. "It won't be pretty, but at least I know what's coming." CBC-TV Brigitte Smutny

Grant Pronishen, after watching his wife, Donna flying Harv's Air's Citabria from the back seat:

"Gee, I think Harv's Citabria bounces higher than ours!

You know, you would be sitting up front in a Cessna 180 on amphibious floats! (hehe, seed planted)

So a recreational pilot's license is only 25 hrs."

Sheila Moodie after her first landing, "I'm sooooo exited!!! I landed, a bunch of times!!!..."

Marion, after another lesson with Luke Penner: "Here's the log book Luke...'Luke training Marion'...I have more time flying the RANS this year than Gilles does!" (we pilots are really looking forward to getting our planes back so we can fly them!).

Heather White, after doing an hour of circuits: "I'm not sure who I scared the most - Aaron or I - while climbing I pulled both the throttle and control stick; the plane came to a dead stop mid air... Aaron instantly pushed the throttle full forward and the plane leaped back to life so we continued our climb out...seems like the throttle and stick should be going in the same direction to me!"

Donna Pronishen, after four lessons: "Well I've had my four lessons.

"Lesson one - a little intimidating but very exciting. I really can fly the Citabria from the back seat seeing only the tachometer and part of the horizon.

"Lesson two- practised landings over fields-- piece of cake

"Forward to lessons three and four- Now I am doing circuits at St. Andrew's Airport-- lining up to the runway and landing. Quite a challenge from the back seat and nerve racking but "I Did It !!! "

Now I would like to know what it feels like to fly a plane from the "front seat". We need to build the 'SeaRey!!!'"

"My quotes will probably be best remembered by Aaron, but I definitely think he would tell you that upon landing one time I bounced and was super glad to have him grab the controls to take over and then I said, "OMG George is watching" and he said "Don't be looking at George right now girl!" (ha!) and one of the funniest is probably how I was explaining to little Kendra Sliworsky, (a neighbour who dropped in to the Lyncrest Community Centre), about how I was approaching that farmer's runway and was so worried about the trees lining the left side (in fact to Aaron after when he asked why I was so slanted to the right I said, "holy $%*% I thought I was going to hit a tree!") but Kendra burst out laughing and said that there's no way I should be scared of hitting a tree in the sky - unless it's a Jack and the beanstalk tree! She was *too* cute. I also had a terrible time taxiing the first 2 classes, for some reason I'd always hit the opposite rudder and we'd look like a drunk driver!

"But in general, I loved everything about the classes and I'm so happy that I landed a few times and I'm really grateful for the opportunity because now I'm much more interested in participating in the flying

Learn to Land candidates crowd into the clubhouse to learn the subtlties of getting an airplane back to Terra Firma with style and grace (i.e., in one piece). Attitude plus power = perfomance...

when George and I go and I feel much more safe as well. I'm hoping to one day get my recreational license in fact! So thank you very much Jill!"- Ashley McIntosh in the Cardinal

Aaron Doherty and Luke Penner, Harv's Air Ltd "Every student is working incredibly hard at mastering these skills at their own speed and doing a terrific job!"

SPIN OFFS

Darlene Stewart to her husband after doing a photo shoot in Harv's Air's Diamond "Bob, are we going to get one of those square instruments (glass cockpit) for the RV you're building, it is really handy! (Pilots overhearing this immediately saw some great spin offs - all we had to do was tip off Aaron or Luke with whatever we were wanting to buy for our planes - If Luke or Aaron recommended it our partners would agree!).

Rick Riewe after doing his 4 hours of flight training: "Its 7:00 lets go flying, the weather is perfect!" (Instead of the old 'Wait until I finish the yard work, vacuuming, or other chores!).

"We are really really excited about what we're learning and Peter is even more excited...I [Sheila] had to tell Dad to stop talking through the landing steps while I was driving the car as I couldn't concentrate!...every night we get to see Dad's photos of the Canuck landing..." -Sheila and Irene Moodie.

Marion, to her partner, Gilles, "Let's 'girly up' this RANS...curtains on the back window, pink headsets..."

"Thank you to Jill Oakes for organizing the Learn to Land course at Lyncrest and for sharing her knowledge and passion for flying. The experience took me completely out of my comfort zone and pushed me to learn basic skills should something happen to my husband Perry while out flying. Having said that, now that I have gained some understanding on how things work it brings a whole new dimension to flying….he may become the one sitting back enjoying the flight and taking pictures. Actually, Perry is adamant that when we go out flying, I will be practicing so as to not lose the valuable information taught to us. Use it or lose it! It opened my eyes up to how much Perry makes it look easy and how I take for granted all the hours of flying he has under his belt.

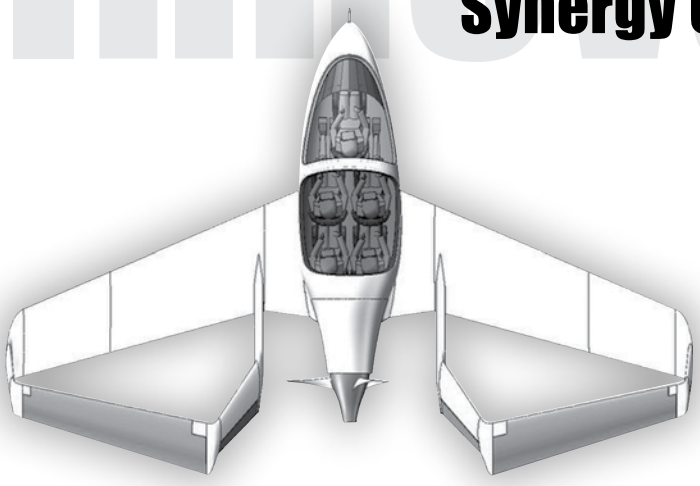
As a side note, Perry always thought if something happened to him I would deploy our on-board parachute to save myself, while my thoughts were to get to Lyncrest as there is a defibrillator in the clubhouse and people trained to use it or someone could call for an ambulance to save him. Interesting how we both had a different perspective but now we have a plan which we hope we never have to action." - Edith Bazin-Chromiec

Happy Flying!!

Rotax Safety Alert

Rotax has released a Revision to the recently released Alert Service Bulletin ASB-912-061.
Revision 1 of this bulletin now contains a list of spare parts available to comply with the Mandatory Alert Service Bulletin. Also updated are instructions for inspection, cleaning and replacement of the pressure fuel hose assembly required to comply with this ASB. This ASB must be complied with BEFORE NEXT FLIGHT.
Please check the ASB for a list of engine serial numbers manufactured with affected fuel pumps, as well as a list of fuel pump part numbers and serial number ranges which were supplied as spare parts. Parts listed in the ASB required for compliance will be covered under warranty. Contact your nearest Rotax Service Center, Repair Center or Rotax Service Provider for more information.
For UL (Uncertified) engines, visit http://bit.ly/LFnnYj
For Certified engines, check out http://bit.ly/OELwip

Synergy Obtains Crowdsourcing



JOHN MCINNES' RADICAL new design, the Synergy, has obtained development funds from the crowdsourcing group *Kickstarter.* In less than a week, the Synergy Kickstarter project raised half their minimum goal of $65,000.

Until recently, the project had been financed through friends, family and personal resources. Kickstarter's involvement will help assure this innovative aircraft continues development.

Originally conceived of as a way of helping artistic endeavours such as theatre groups access to funds through small donations, Kickstarter initaially rejected the project, but has since reconsidered Synergy's application.

The 5-place aircraft features almost too many innovations to list. Reduction of induced drag is obtained by taking the winglet concept to a whole new level, while laminar flow, wake propulsion, and the area rule fuselage combine with an elegant, robust structure make this aircraft an exciting development.

Configured around DeltaHawk's two-stroke, 180 hp diesel, we'll be hearing a lot more about this aircraft in the months and years to come.

For more information, check out Synergyaircraft.com. A video explaining how it all comes together can be seen at http://bit.ly/LPo29r

FlyNano Maiden Flight

The FlyNano personal sport aircraft flew for the first time on June 11, 2012 at a lake in Finland.

The aircraft was unveiled last year at the Aero 2011 trade fair in Friedrichshafen, and was intended primarily to be powered by an internal combustion engine. Recent improvements in electric motors and batteries have prompted further research into the all electric version and the electric version will be their primary product.

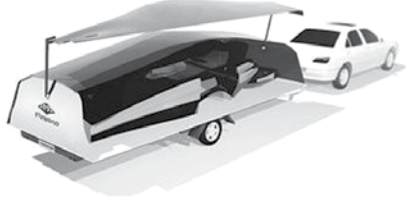
They won't be at Freidrichshafen this year as they are busy testing and refining the aircraft prior to making it available to the public.

Its specifications underscore the fact that this is intended as a low-altitude recreational vehicle - sort of an aerial Jet-Ski, more for an afternoon at the lake than a cross-country trip.

Their goal is to produce 35 aircraft by the end of 2013.

For a brief video on the maiden flight, check out http://bit.ly/M1heUV

Empty weight	**< 70 kg**
MTOW	**200 kg**
Wingspan	**4.8 m**
length	**3.8 metre**
height	**1.5 m**
Cruise	**140 km/hr**
Land	**70 km/hr**
Ceiling	**3,000 m**
Range	**40 km**
Power	**20 KW**
Price (Anticipated)	**32,000 Euros**



Engine Failure In My Europa

Chris Staines

ON MARCH 30TH I had an incipient engine failure in my Europa. As I came into land at London Airport after a brief trip to Brantford, I was told smoke was coming from my plane and they quickly got the fire trucks out to greet me on the Alpha taxiway. The smoke was coming from the exhaust pipe along with some oil. One of the firemen helped me pull the plane to my hangar where I removed the cowling and inspected the engine. The turbocharger impeller was found to have seized, though the engine could still be turned over by hand. The oil tank was empty and a preliminary diagnosis revealed turbocharger bearing failure and seal failure, allowing the contents of the oil tank to be pumped into the exhaust system and induction system.

The engine has been shipped back to Rotec Research of Vernon B.C. and a new one is almost installed in the plane. Transport Canada has suggested a 'Service Difficulty Report' be filed and after Rotech has a good look at the engine we will do so. The Rotax 914 was one of the earliest versions of that engine and Rotax has issued more than a few ADs and service bulletins. I had recently switched to a new Rotax approved oil called Aeroshell Sport Plus, specifically formulated for the 912/914 series of engines, though it is a semi synthetic and not as stable at the high temperatures you would find in a turbocharger bearing. I had previously used Mobil 1, a full synthetic recommended for the 914, with better high temperature stability. Rotax recently issued their fourth revision on operating fluids (read oil) and only Mobil 1 is recommended for higher temperature operation. The US military uses modified (classified) 914 engines in their drones and they use Mobil 1 oil, which probably tells me something, along with the numerous revisions to the oil recommendations.

What did I learn from this? If something works well, don't be in a big rush to change it. Don't be the first to buy a newly designed engine, even from a well-established manufacturer. To those contemplating the purchase of the newly released fuel injected Rotax 912S, be cautious. The early customers are often unpaid participants in product development.

I consider myself very fortunate and my wife Diane reminds me of this whenever I quibble about the cost of a new 914. To have an engine failure over an airport is lucky, to have it over your home airport is Divine intervention. When I think of the many trips, over 800 hours of operation, to Sudbury, Ottawa and other places where you see a lot of bush, water and rocks, I have indeed been blessed having this occurrence at this location. Guess which oil I will use in the new engine? In installing the new engine, with a 2000 TBO versus 1000 hours for the old one, I have noted many design changes and hopefully this engine will be trouble free.

I hope to get working on my GP4 project again as soon as I get the Europa back in the air.

RAA Canada had a metalworking display at the Aircraft Spruce show in Brantford. Above, left Jacqueline Nusko of Wiarton was one of the attendees who learned the basics of the English Wheel. Top right, Member Len Halley demonstrated the use of the English Wheel to form aluminum. Right, RAA treasurer Wayne Hadath with his F-1 Rocket race plane was one of the featured acts at the Waterloo Airshow.

Winnipeg

Air Space Review Update / Jill Oakes

TERRY FERGUSON from Nav Canada continued the consultation process, presenting an open forum to discuss proposed changes to the air space in the Winnipeg-Lyncrest-St Andrews, Steinbach-Portage areas on February 28th at the Hilton Hotel in Winnipeg. RAA, COPA, MAC, Shoal Lake Flying Club, Springfield Flying Club, St Andrews Airport, Winnipeg Airport, and Transport Canada were a few sectors of the aviation community present who shared insights and clarified proposed changes. This has been a multi-year project, with numerous consultations with all sectors of the aviation community using this air space. The proposed changes support increased safety and are generally very well supported by VFR and recreational flight in the area. There may be a few more minor adjustments before the proposed changes are adopted; they will be implemented only after extensive communication with the aviation community. Some of the proposed changes that impact VFR recreational pilots include:

Raising the ceiling over Lyncrest Airport to 3000' ASL

Expanding the air space available to Lyncrest Airport for circuits

Identifying Lyncrest Airport's airspace using geographical landmarks so it will be easier for VFR traffic to identify the space (eg Dugald Rd to the north).

The 700 AGL Class E Transition Area near Lyncrest is only for IFR - won't impact VFR

Winnipeg airspace is being expanded from 12 to 13 miles radius, meaning Pilots in the Lyncrest area that want to stay clear of Winnipeg's Control Zone will need to fly about a mile outside the floodway

St Andrews Airport Class D airspace has been expanded + warning boxes added so we're more aware of where IFR training patterns are practiced – these warning boxes are not restrictions

The border of the practice area north of Hwy 44 is being expanded eastward, the radio frequency for the practice area will be published on the map, and the practice area will be divided into three segments so we'll have a better idea of where someone is located in that area.

The airspace around Steinbach has been expanded and the Class E is needed to manage traffic using the airway passing through this area

The Glider Airspace near Starbuck is being expanded and defined with geographic landmarks so easier to identify for VFR Pilots

In the Southport Airport area, due to IFR separation and IFR training there is no efficient method to transition at this time, therefore the Class C airspace 3000' ASL and above is being kept to ensure no conflict between IFR and VFR approaching or departing Winnipeg area. This is not expected to create an issue for VFR pilots as unless all ATC employees are sick they now have enough staff to staff Class C airspace requests from VFR pilots. The Southport airspace's northern boundary has been cleaned up to follow the TransCanada Hwy for easier identification by VFR pilots.

The amount of Class C airspace to the west of Winnipeg has been reduced in the NW and SW (dotted red lines mark the old fishtail Class D airspace). Pilots flying from NW (eg Minnedosa) to Winnipeg will need to stay below 3000 ASL and north of Hwy 1 to clear Class C airspace.

The proposed changes support increased safety and are generally very well supported by VFR and recreational flight in the area

Proposed revisions create an airspace management system that can evolve as new, more sophisticated navigation technology is developed, increasing flight path accuracy and thereby narrowing flight paths, which will significantly reduce the amount of air space needed by IFR traffic. This proposal is the first step in this development. Nav Canada plans to recommend VFR routes, eg between Steinbach and St Andrews.

Details not typically placed on the VNC will be published on the back side of this map to facilitate movement in this area.

Final Revisions are expected to be implemented before February 2013, after extensive communication with all sectors of the aviation community.

If you have any questions or comments, you are invited to email them to Terry Ferguson at FergusT@navcanada.ca.

Stuart MacConnacher of Light Aircraft Association, UK hands over certificate of twinning to Bill Tee of Recreational Aircraft Association -Toronto Region on behalf of Devon Strut of LAA. Certificate was formally handed over to chapter president Fred Grootarz of RAA-TR by Bill at 4 June meeting of RAA-TR.

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Magazine ..... George Gregory
Insurance Committee ..... Gary Wolf
AirWear.....Dave King

Across Canada

RAA Chapters in Action

RAA Chapter 85 (Vancouver)

Peter Whittaker is a new member of the chapter who is in the final stages of his Zenith 601 HDS. We look forward to developments on this great airplane.

Custodian Bruce Prior reported that the calibration weights for the RAAC scales are complete and the scales have been used twice. He's created an asset list for the chapter.

There was some lively discussion about how to promote the club. The creation and distribution of promotional material, building a sidewalk, the creation of educational programs, even the replacement of the Turbi with a more modern, side-by-side aircraft was discussed.

One intriguing idea was the construction of one or more gyrocopters. They are relatively cheap, quick to build, and unique, attention-getting aircraft.

A conventional project plane was discussed as well as the purchase of radio equipment for the clubhouse. It's all about raising the profile of the chapter and serving the flying public!

Members pull Peter Whittaker's Zenith 601 HDS onto the RAA scales in preparation for doing the weight and balance.

London-St.Thomas

Tom Martin reported that Van's original aircraft, an RV-1, has been restored and was seen at Sun-N-Fun etc.

Phil Hicks and Charlie Murray attended the update seminar at Hanover recently, noting that it was well attended and worthwhile attending. Phil proposed the formation of a steering committee to plot where the Chapter is headed in the future.

Bob Buchanan reported that fifty-six memberships have been paid to date. Aircraft Spruce is having an open house on June 2nd. The Flamboro RAA is having a fly-in breakfast on May 19th. A probably similar recurrency seminar and fly-in breakfast with an aviation related flea market, is planned for Chatham Airport, May 26th.

Dave Hertner reported about two hours of engine operation on the ground, and is ironing out some radiator venting problems. Stan McClure is waiting for the most ideal weather so the Starlet can be flown again. Meanwhile he has been flying the Lazair. Denny Knott reported a rather large fuel leak in the Skyhopper, but Nick Smith was able to do a weld repair on it. Gus Cameron noted that a recurrency seminar which he attended in Centralia recently was a good event with about seventy in attendance.

Phil Hicks introduced our presenter for the evening, Hugh Shields. Hugh is a member of the London/St.Thomas Chapter and flies a beautifully restored Chipmunk, which is hangared at St.Thomas Airport. Hugh describes himself as a casual pilot, and noted that his son flies for Air Canada Hugh was the Executive Director of the air-show last held at St. Thomas, and will serve in the same capacity for the next one coming up in 2013 at St. Thomas as well. Hugh showed us a film clip that is used to present the air show to potential corporate sponsors (and groups like us). Following the film clip, we saw a Power Point photo presentation featuring a great many photos from the air show itself, and many of the volunteer staff during the preparation and setup of the show at St. Thomas. A lively question period followed Hugh's very informative and interesting presentation.

Scarborough-Markham

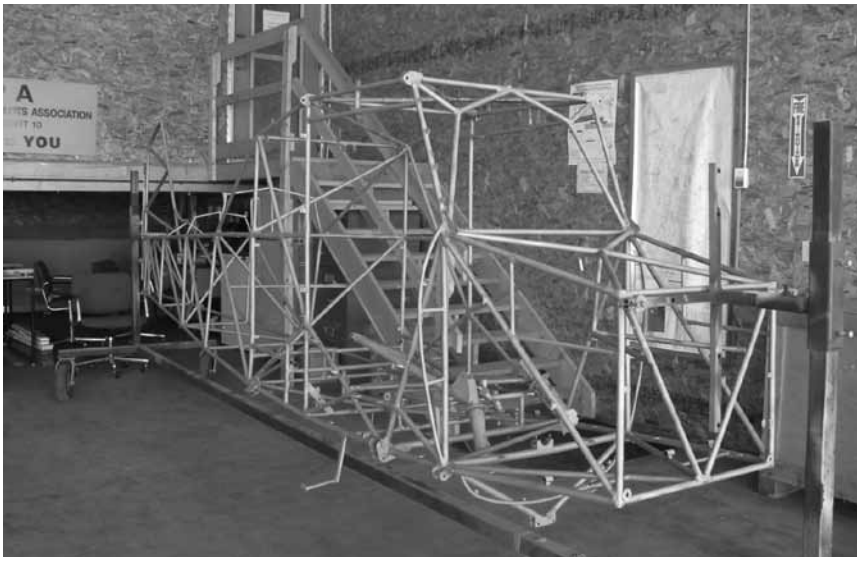
We wish to thank Paul A. Hayes who spoke to us at our April meeting. Paul is a former Brigadier-General (retired) in the RCAF. In parallel with his own career, Paul effectively gave us a history lesson of the role of the RCAF in post-WWII Germany. He started training in Alberta on Harvards at age 18 in the early 50s, then on to Vampires ("the cockpit was a mess!"), spent some

time on T-33 trainers in 1955, and then with the Mark 5 version of the Sabrejet given to the reserves. At about this time, the "peacetime" RCAF was ramped up for the part Canada was to play with NATO. It was clear to the audience that Paul has had a lifelong love affair with the F-86 Sabre, particularly the Mark 6 version as used by the Golden Hawks aerobatic team. The early F-86E Sabre could do 480 kts with the GE J-47 engine; Sabre 5/525 kts/Orenda 10; Sabre 6/540 kts/Orenda 14. Paul began flying these aircraft at CFB Baden-Soellingen in the early 60s. The new air force of West Germany bought 225 Sabres from Canada, built under licence by Canadair (both the Mark 5 and Mark 6 versions). The RCAF mission was to provide tactical training of the German pilots with these Sabres headquartered at Metz. At the buffer zone between West and East Germany, there were two squadrons of Sabres on full alert at all times. Much effort was spent on training for tactical air fighting, with occasional close encounters with Russian MiG-15s and -17s at the edges of the buffer zone. The Sabre was retired in 1964. We are grateful to Paul Hayes for giving us a real insight into the life of an air warrior during the cold war in Europe.

RAA Ottawa - Rideau

Our President Victor Thompson brought the meeting to order at 8:pm sharp. Victor presented an entertaining Power Point presentation of his view of FunNSun 2012. It appears that the Ottawa volunteers at this year's were having fun. Thanks for a great presentation Victor.

Anne Barr gave a financial report and collected some memberships. RAA Kars Fly-In is scheduled for Sunday, July 15th. Everyone enjoyed the coffee and donuts!



Saskatchewan Chapter's Christavia project is coming along nicely. Members have been diligently plugging away since November 2011; the sandblasing was completed in May. Onwards and upwards!

RAA Saskatchewan

RAA Saskatchewan has been busy over the winter. Our club project is well under way. Last time we reported, we had recently purchased a Christavia and the plan was to strip down the plane and see what work was needed. On November 12, 2011, the first work bee was held. Since then, every Saturday from 0900 to 1200, club members meet to work on the plane.

In November, all the wood and fabric was removed. In addition, the fuel tank, instrument panel and gears and cables were removed from the frame.

In December the work continued. Brake lines and landing gears were removed. The airframe stand was obtained and the plane hoisted and installed on the stand. Hope was that after some top drilling for the wings the frame would be sandblasted and painted before Christmas.

The jig had to be blocked and the airframe leveled. The struts were checked for length and then the whole thing was put aside over Christmas and New Years.

February saw the return of the Saturday work bees. The frame was set up, blocked and leveled again. Then the

Join the RAA Forum

RAA's new forum is online! We hope to add many features over the next while to enhance the value of your membership. The URL is the same at raa.ca - once you're on the home page, simply click on the "forum" tab to get there. You'll find it a useful place to exchange ideas and ask questions - but it's only as good as the people who contribute to it. Help make this a useful resource for builders and pilots.

Any suggestions and ideas for improvements are welcome and can be sent to George Gregory at gregdesign@telus.net. Stay tuned for further developments!

RAA Winnipeg, RAA Brandon, the Brandon Canadian Air Training Plan Museum and The Canadian Aviation Historical Society have been hard at work restoring their Tiger Moth. Here members learn the finer points of DeHavilland rib construction and installation.

top cabin was installed and the wings placed on top to check for alignment. By the end of February, the wings were top drilled and holes reamed.

In March, tubing was cut to square the cabin section and then welded in place. Thanks to our handy members, eight welds were completed on tubing that had been cut to perfect angles to meet the aircraft standards. The frame was sent for sandblasting which was just completed in May. (The pictures shown capture the frame at this point in the process.) Now it's time to get it painting and keep on building!

For other hangar news, the air activity has increased significantly with warmer summer air. Our club hangar (Prairie Partners Aero Club hangar) at Richter Field (CRF5) is host to eggs and bacon, or chef's delight every Sunday at 0900hrs. We had our season opener on Mother's day with 37 attendees and a whole lot of planes! Fly in and join us anytime!

Tiger Moth Rib Building Workshop
By Jill Oakes and Rick Riewe

The Brandon CATP Museum, Brandon RAA, Winnipeg Area RAA, and Canadian Aviation Historical Society met at the RAA Workshop Final Assembly Building March 8th for an evening workshop on building Tiger Moth Ribs. About 20 people came out on a blustery winter night. Unfortunately the RCMP closed the Trans Canada Highway due to black ice and blowing snow, keeping

continued on page 34

Story and photographs by Kathy Sutton : The story of their build and flight from Brampton to Idaho

A GlaStar Project Takes Wing:

GlaStar

IN THE SUMMER OF 2011, my husband Steve and I flew our recently-completed GlaStar from Brampton, Ontario to a fly-in at a remote grass strip in the mountains of Idaho. We had only 41 hours on the plane when we departed. Over the18-day trip we logged 33 hours flight time and landed at 18 different airports in 12 US states. We visited family, made a lot of new friends in the flying community, toured some amazing parks, camped under our wing, and flew over some fantastic scenery.

Our GlaStar performed magnificently. The only snags were a burned-out landing light, a leaky quick-drain (fixed enroute), and a ding in the nosegear fairing due to a nosewheel shimmy (due to insufficient tension on the Belleville washers – easily fixed).

Steve and I really love taking long cross-country flights. For most of the 14 years we worked on the GlaStar we also owned a Cessna 150, and used it for several long trips. But our flight to Idaho was special, as we did it in the plane we built ourselves. It was truly a trip of a lifetime, and we hope the first of many more ahead.

Buying and building our GlaStar

It was at Sun 'n Fun 1996 that Steve and I took the plunge and bought the tail kit for our GlaStar. This was after several years of looking at various kit planes. We owned two ultralights and loved flying them, but we wanted something to take us further and faster. Since we both enjoyed building things, we figured that building our own airplane from a kit would be the best way to get what we wanted, at a cost we could afford.

The GlaStar met our mission in every respect, from its great flight characteristics, good looks and respectable airspeed, to its cross-country capability including a high useful load, decent range and large baggage area. The kit was reasonably priced, the company had a good reputation, and the instruction manuals looked easy to follow. We got busy building jigs and acquiring tools, and soon work on the kit was underway in our single-car garage. First the tail section and then the wings took shape, with the fuselage work to follow.

We initially thought we could finish the project in three to five years. Little did we know that it would be 14 years before our first flight! As with many amateur builders, we not only had busy full-time jobs, but we also had to spend time learning the skills required to build – as well as hunting down all the tools and materials we needed. As well, we found that life events – including health, family and business issues, as well as household moves and travel – cost us a lot of time on the project.

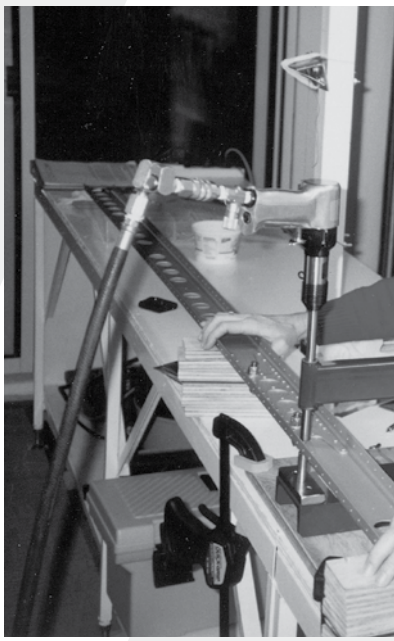
A few years into the project, we bought a hangar at Brampton. There was room for another plane, so we bought a 1975 Cessna 150 – a great move, as we could keep up our flying skills during the building process. We put over 400 hours on our trusty 150, and went on some great trips, including three to Florida and a couple to the east coast. However, we could hardly wait till we could complete our much faster and more powerful GlaStar.

We sold the 150 in 2009, so we could focus on completing our GlaStar – as well as all the paperwork required to get it legally into the air. In May 2010, Bill Tee did the final inspection, and we sent off the paperwork for flight authorization.

First flight

Finally, after 14 years of construction, on August 15, 2010, our beautiful GlaStar took to the air. What a great moment that was! Arielle flew perfectly, and was everything we dreamed of. There were only a few minor snags to address, and we had great weather, so it took us only two weeks to do our initial 25 hours. The very next day I gathered all the paperwork and tracked down our local Transport Canada rep. He issued our Special C of A while I waited - so now we were officially off the "short leash" and could start planning some adventures!

The proud couple in a very small build space. Centre, Kathy uses a rivet squeezer on the rear spar; upper right, Kathy with the RAA's Bill Tee, who performed the requisite inspections and supplied a steady stream of encouragement. Lower right, Steve shows off the Glasair's nosewheel assembly. The build took 14 years.



Steve and I are both very proud of our GlaStar and have no regrets about all the time, money and effort it took to build. We did 90% of the work ourselves, and learned a lot of new skills along the way; this is what homebuilding is all about.

Planning our first big trip

Over the next few months, we only had time for a few day trips. But we spent plenty of time planning our first long cross-country! As members of the GlaStar & Sportsman Association, we noted that there was a GlaStar fly-in in June 2011, in the mountains of Idaho. Coincidentally, my sister and brother-in-law live in Boise Idaho, so we would be able to visit them on the trip too. No more reasons required – let the planning begin!

In the spring of 2011 we started to get ready in earnest. As well as preparing the plane, we also spent lots of time reviewing US flight rules, border-crossing procedures and so on. We also read up on mountain flying, which would be a totally new experience for both of us. (Our notes on what we did to get ready appear below, in case this is helpful to others.)

Finally, we also chose a name for our plane: Arielle, which means "light and graceful spirit of the air."

On June 15, when we departed Brampton, we had a grand total of 41 hours on Arielle and her brand new engine. We had never flown her further than Stratford or higher than 5000 feet. But we had a lot of confidence in our new plane, and were ready for our big trip west. The rest of this story describes our flight to Idaho and back; more information on our GlaStar, C-GNSK, appears in a sidebar.

Getting ready for our trip to the US

Months before: Get US customs decal. Register for EAPIS. Contact the fly-in organizers. Complete more details on the plane. Finalize normal and emergency checklists. Pack a tool kit. Buy a PLB. Update our GPS data cards. Purchase Foreflight for our iPad. Buy RAM mount to secure the iPad in the cockpit. Make lists of what to take. Think about routes.

Week before: Weigh all the stuff we're taking. Make sure batteries are current. Do a trial loading; check weight and balance. Check routes & area weather. Contact other pilots going to the same fly-in; we plan to hook up with Will and Ann Crook, who are flying their GlaStar from NC to the same fly-in. Arrange cat-sitter, cancel newspaper, etc.

Day before: Check weather. Log on to EAPIS site and submit manifest. Call US Customs in Erie. Fill out flight plan form. Pack suitcases & snack bag.

Idaho Trip Notes

Wednesday June 15, 2011 (Brampton ON to Findlay OH: 2.4 hrs flying time)

Up at 5 a.m., make coffee, drive to the Brampton Flying Club. Steve gets the plane ready while I file our cross-border flight plan to KERI (Erie PA). Wheels up at 8 a.m., right on schedule, and we enjoy the short flight over Lake Erie. Smooth landing at Erie. The US customs officers are friendly and welcoming; we would definitely go there again. Fuel up and continue our way west. Then Flight Watch advises of deteriorating weather ahead, so we stop for an overnight at Findlay OH. Arielle stays in a hangar for $40, and we check into a hotel for not much more. We go for lunch, wander the town, & relax before dinner out. I send some emails using the 3G network; my new iPad is working out

great – with the ATT card, no need for Wifi!

Thursday June 16 (Findlay OH to Washington MS: 3.8 hrs)
Up early and off to the airport. Steve loads the plane while I check weather. Just before takeoff, Will calls Steve on cell and they discuss where we should try to meet. (Though our destination is still uncertain, I'm thinking the theme will be either "Kansas City Here I Come," or "Meet me in St Louis"). We take off at 0945 and the light scud becomes a nice mix of sun and cloud. Even with a honking headwind, our groundspeed is still a respectable 100 kts. We pass Grissom Air Force Base and many miles of beautiful farmland across Indiana and Illinois. It's very clear and a bit bumpy. Loving our True Track autopilot! We stop for fuel before we cross the mighty Mississippi, just south of St Louis. Weather now hot and looking stormy; mild anxiety & moderate bickering in the cockpit. We use our iPad

Say Ahhh: the Glastar has baggage room to spare.

to check the weather radar; works great as long as we have a cell signal. We divert south to avoid a few storm cells, then stop for fuel at Washington Regional (KFYG) just west of St Louis. Very nice FBO and friendly manager (Kevin). With stormy weather all around us, we decide to stay overnight. Tuck Arielle into a hangar (free!), and take the crew car to find a motel and explore the town before a good dinner on a patio near the flooded Missouri River. Steve talks to Will and they make a new plan.

Friday June 17 (Washington MS to Ogalalla NB: 5.6 hrs)

Up early to blue skies! But soon there's a scattered layer at 6500, so we climb to 8500 (never been this high before!). Our groundspeed is now 143 knots - woo hoo! Spend some time getting the mixture just right. We're

GLASTAR C-GNSK

Empty weight:	**1342 lbs**
Gross weight:	**1960 lbs**
Useful load:	**618 lbs**
Fuel capacity:	**50 US gallons**
Engine:	**Superior O-360 by Aerosport Power**
Propeller:	**AeroComposites 2200 constant speed**
Cruise speed:	**145 kts (8000 ft, 75% power)**
Stall speed:	**42 kts**
Fuel consumption:	**9 gallons/hr (approx.)**
Rate of climb:	**1500 fpm (gross wt)**
Service ceiling:	**21,000 ft**

Avionics etc.: Bendix/King KMD 150 GPS Garmin GX65 GPS/Com, Garmin Transponder, TruTrak 2-axis autopilot, VMS Engine Monitoring System.

over the flat farmland of Kansas now. We make good time and our 2nd fuel stop is Ogallala NB (OGA). Free hangar, free crew car, we're tired, and bad weather ahead. So we decide to stay the night. Visit Boot Hill and stay at the Stagecoach Inn. We are in the Wild West now!

Saturday June 18 (Ogalalla NB to Jackson Hole WY: 4.2 hrs)

Today we approach the Rockies and will get our first taste of mountain flying! The forecast is clear but windy. Wheels up at 0800. We fly roads and rivers, mindful of our altitude as the terrain rises. Flight Services reports good wx ahead. We see snow-capped mountains in the distance, just before a fuel stop at Riverton, Wyoming. A local pilot tells us to just follow the road that goes through the 9600 ft Togwotee Pass - a good idea, given that it crosses the Teton Wilderness Area, with peaks of over 11,000. We do just that - keeping our eyes on some snow showers to the south - but the winds are light and our heading is due west. Flying through the pass is a huge thrill, and soon after we're over a beautiful green valley and close to Jackson Hole (JAC). Our plan is to continue past JAC a few more miles south to Alpine Junction, where we will meet Will and Ann. But the weather in that direction looks scary, so we make a quick decision to land at JAC. I'm cleared to land behind a Citation, and taxi to the ramp. The ground crew treats us like royalty! We tie down for the night and go to the swanky FBO for coffee and popcorn. We're told that the landing fee for our plane is a whopping $4.68! Guess they're used to heavier planes than ours. The FBO sends a van to fetch our luggage and arranges a rental car. Soon we're on the road to Alpine Junction, where we finally meet Will and Ann, who have their plane tied down at the very small airport there. We check out their plane then settle into a lovely mountain inn. Great dinner, accompanied with some interesting aviation stories.

Sunday June 19

A non-flying day due to low ceiling and showers. Catch up with email then (with Will and Ann) we drive to Jackson Hole for brunch, shopping, and touring. We see a baby bull moose, a coyote, hares, and lots of birds. Later we tour the Wildlife Art Museum.

Monday June 20 (Jackson Hole WY to Boise ID: 2.6 hrs)

The weather is still iffy as we drop Will and Ann at the airport in Alpine. He is instrument-rated, so they plan to take off despite the mountain obscuration. We drive back to JAC, pack the plane, return the car, and check the forecast - looks good! Wheels up at 0930 and we climb to 11,000 to get above a scattered layer. I experience some mild hypoxia but soon the skies clear and we're over the Snake River Valley, where we can cruise at a comfortable 6500 ft. Getting very comfortable using our TruTrak autopilot to fly a GPS route. The scenery is great! We fly down the raging Snake River, over the Craters of the Moon National Monument, and see Big Southern Butte in the distance. As we near Boise, I talk to approach and they let us fly right over the city on our way to Caldwell, the small airport where my sister Sally is picking us up. It's great to see her, and we will have a good long visit as the fly-in doesn't start till Thursday. She whisks us back to her home, where we rest & do laundry before enjoying a great bbq dinner. Nice to eat my sister's cooking!

Tuesday June 21 (Boise ID to McCall ID:

There is nothin and a bunch of

0.9 hrs)

It's our 26th wedding anniversary today. Blue skies and severe clear! The plan is fly the short distance from Boise to the mountain town of McCall Idaho, where Sally and her husband Russ have a gorgeous log home close to the local airport. Steve suggests that Sal could go with me, and he will drive her car. Great idea! Sal and I enjoy the very scenic flight and arrive in less than an hour; Steve pulls in about 90 minutes later. The McCall Airport features a mountain flying school, a great pilot lounge that includes a stuffed cheetah in the corner, and plenty of interesting airplanes on the ramp. We take a pizza home for lunch then do some touring and shopping.

Wednesday June 22 (McCall to Smiley Creek ID: 0.9 hrs)

We relax for the morning and Steve washes the plane. I call a forecaster around noon. He tells me the weather from here to Smiley Creek is VFR now but they expect thunderstorms late in the day and tomorrow. So we make the sudden decision to take off ASAP and head to Smiley Creek. Steve flies, while I photograph the dramatic Sawtooth Mountains below. The skies ahead look stormy and see lightning strikes in the distance - but the GPS tells us we're 7 minutes from landing, so we fly on. It's a relief to see the beautiful long landing strip and Steve makes a great landing at Smiley Creek (elevation 7160 ft). We're the 4th GlaStar to arrive! We tie down, pitch our tent, and get a ride to dinner with the fly-in organizers. Cold night in the tent with thunderstorms and light hail.

Thursday June 23 to Sunday June 25 (at the Smiley Creek GlaStar Fly-in)

There is nothing better than camping with your plane, with a bunch of like-minded people. Some highlights: morning coffee at the lodge; watching 20 planes arrive (all GlaStar or Sportsman, except a couple of locals with spamcans); admiring other people's workmanship; meeting people we'd only known through GlaStarNet, our online newsgroup; taking shelter during the thunderstorm in the middle of a bbq dinner. And that was only the first day! More highlights: driving to the town of Stanley for cinnamon buns; an afternoon on horseback in the mountains; evening campfires; hiking and group dinner at Redfish Lake. We were presented with a map of Idaho for having flown the furthest to get here. Moved to a motel for our last night, so we could get a good night's sleep before departure.

Sunday June 26th (Smiley Creek to West Yellowstone, MT: 1.8 hrs)

The fly-in ends today & we're off to new adventures. We pack up, have oatmeal & coffee with our California friends, and watch as GlaStars depart to all different directions. Our route will take us east to West Yellowstone airport (WYS), Montana, where we'll meet up with our Canadian friends, Karen and Stan, in Karen's Cessna 180. They departed Bancroft 5 days ago and have been stuck on Drummond Island, waiting out some nasty weather, till this morning! We say our goodbyes and taxi for takeoff. Steve flies today; the grass strip is wet & not much wind. He leans out for takeoff (standard practice at altitude). We're happy to have our powerful O-360 and constant-speed prop in front, as we take off into the sunshine and climb to 9500 ft (this didn't take long, as our takeoff altitude was over 7000 ft!). We pass Sun Valley, then Craters of the Moon again, and skirt a couple of big MOAs along the Snake

g better than camping with your plane like-minded people

River basin. After crossing Red Rock Pass we radio ahead to WYS. As we land on the long paved strip, Sandy (who runs the airport) comes out to greet us. She helps us tie down and gives us a ride to the town of West Yellowstone, which is only two miles from the park gate. We check into the One Horse Motel, go for a walk & pizza dinner, and shop for souvenirs and breakfast food. Hoping to hear that Karen and Stan are on their way!

Monday June 27

It's a CAVU day and there's good news from Karen: they finally have good weather and will arrive at WYS by noon. Steve and I head downtown for good coffee, then hitch a ride to the airport. Karen and Stan arrive at last & it's great to see them. We plan to tour the park for the next 2 or 3 days, so we rent a car & settle in to a lovely cabin on Hebgen Lake. We shop for snacks, head into the park, and spend the afternoon walking around the spectacular Old Faithful area; back to the cabin at 7 pm and to a local lodge for dinner.

Tuesday June 28 & Wednesday June 29

Two glorious days touring the magnificent and huge Yellowstone Park. We see a lot of wildlife as well as some amazing terrain - some of it like moonscapes, but also plenty of beautiful forests, waterfalls, and of course the geothermal features. The Grand Prismatic Pool is especially spectacular; I plan to take an aerial photo of it when we depart. By early afternoon Wednesday the wind is howling. I call the AWOS & hear that the local density altitude (always reported at US airports) is 9100 ft; winds are 28 kts gusting to 45! We head to the airport to double-up our tiedowns. (Interesting note: the airport has a perimeter fence; it was built to keep buffalo off the runway, not to keep people out).

Thursday June 30 (West Yellowstone to Spearfish, South Dakota: 2.4 hrs)

We wake up to light winds and a gorgeous flying day. After our goodbyes to the wonderful FBO crew at WYS, we take off and climb out to enjoy a spectacular flight over Yellowstone Park. Karen and Stan are 10 minutes behind and we chat on the air-to-air. Great that our GlaStar and Karen's 180 cruise at the same airspeed. We fly over geysers, forests, rivers, grassy plains, lakes, and finally the Bighorn Range, with peaks of 12,000 ft and more. The flight to Black Hills airport, at Spearfish SD, is only about 2 hours, and we see no other air traffic. The variety of terrain is amazing; after the mountains it's all red rock cliffs, and barren wilderness. Eventually we see a few small towns, then the Black Hills of South Dakota. Again, we find a very welcoming FBO and soon are on our way to a hotel in a rented van. After lunch, we're off to see the famous Mount Rushmore. We're tempted to fly by it in the morning – but decide it wouldn't be a good idea.

Friday July 1

Spent the day sight-seeing and resting.

Saturday July 2 (Spearfish to Manistique, Michigan: 5.9 hrs).

Up at 0530 to clear skies. But just as we got to the airport, we see a huge thunderstorm and lightning to the west, approaching fast! No time to top up the tanks. We scramble to load the planes and make a quick getaway. Not many choices for fuel stops enroute, so we ended up at a cropduster strip in the middle of nowhere. Good tailwinds as we crossed the farmland of the Midwest – much of it devastated by floods.

Fuel & lunch at St. Cloud Minnesota, then we continue on to Schoolcraft Airport at Manistique. Tied down for the night and walked across the road to the lovely and cheap Holiday Motel, from which we could see our planes! Finally drank the beer that Stan and Karen brought with them all the way from Bancroft Ontario. The local casino offered free limo pickup, so that's where we went for our last dinner together.

Sunday July 3 (Manistique to Brampton, Ontario: 2.6 hrs)

I used my iPad (and Karen her laptop) to file our departure information with EAPIS; within minutes we receive authorization to depart the US. We phone Canadian Customs with the required advance notice of arrival, then check out of the motel, pack the planes, and finally file our US flight plans by phone. Compared to that, flying is easy! It's a lovely flight along the north shore of Lakes Michigan and Huron to Gore Bay, on Manitoulin Island, where we stop to clear customs. We say farewell to Karen and Stan; they will go direct to Bancroft while we head to Brampton. We tuck Arielle into the hangar and head home. Although Steve and I are both pretty tired, we had so much fun on this trip that we just can't wait for the next one! Time to start planning… R

Mr. Funnel

FIFTY YEARS AGO anyone with an outboard boat had a steel funnel with a fine mesh screen to separate water from the fuel. Mr. Funnel appears to have recreated this but with an improvement. This funnel has a sump surrounding the fine mesh finger strainer, so water will tend to collect there rather than piling up against the mesh and blocking the flow of fuel.

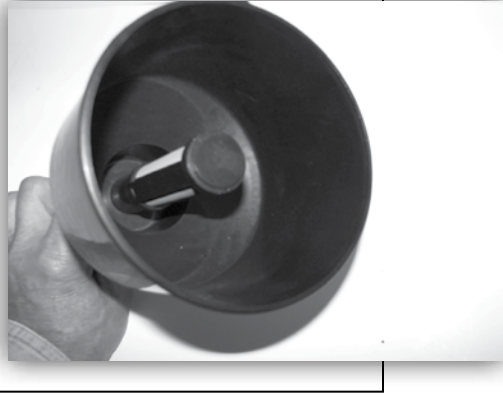
To test the effectiveness of the strainer nearly half a water bottle of fresh water was added to a gas can that was full of nasty old pump gas that had been drained from a motorcycle. The resulting slurry was poured through the Mr. Funnel to see if any water could get past the screen. It was apparent that the Mr. Funnel was doing an effective job of keeping back the water and debris, while allowing the fuel to pass through. The water was decanted back into a bottle and although it was clear it ws probably not drinkable.

The instructions on the funnel caution the user not to stir the fuel up because that will reduce the water droplet size, and some might get through the screen. They suggest to let the fuel stand for awhile to allow the water to precipitate and coalesce to become larger blobs. The instructions also caution the user not to wipe the funnel out, and this is probably for fear of damaging the fine screen. If using auto fuel it can be poured through the Mr. Funnel when filling the jerrycans, and again when filling the airplane tanks.

There is no caution given against static electricity buildup, nor is there any means of grounding the funnel. For aircraft use it might be adviseable to clamp a sheet of copper against the inside with a large alligator clip attached to one end of a ground wire.

Aircraft Spruce and many other outlets sell this funnel for approximately $20, not a bad price for a first line of defence against water in the fuel tanks.

LEFT TO RIGHT: This is water and some swill that would not pass through the screen And here is the water back home in its bottle, with some fuel swill and debris to boot. The sump allows water to collect instead of blocking the mesh screen.



The Cadillac of T-Hangars

By Bill Wojcik

REMEMBER BACK as a young lad walking home from school, and suddenly stop as the glint of sunlight off a shiny object caught your eye? The new found treasure of a simple washer would become part of your worldly treasures in an old cigar box.

Fast forward over fifty years now as a grown man driving his car down a country road while catching a shard of reflected morning sun off a structure located at a private airfield near Courtland Ontario, with a row of wooden T-Hangars and home for the Tillsonburg Flying Club.

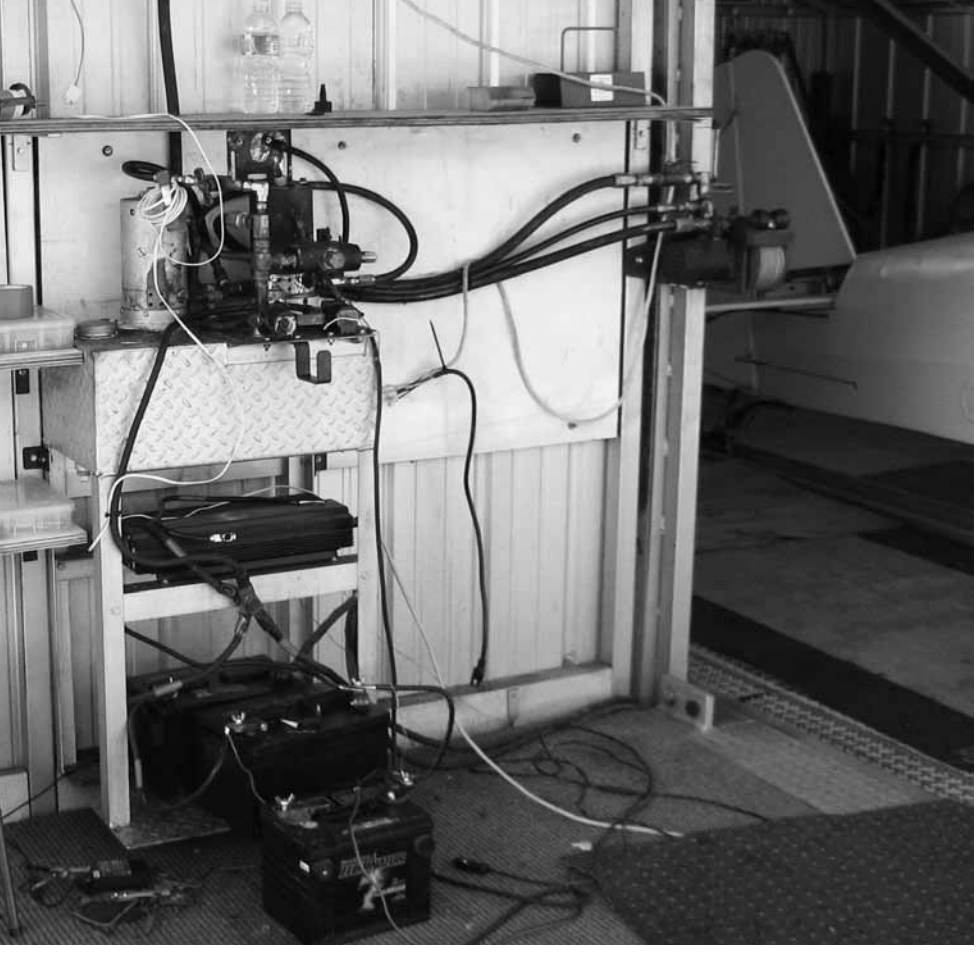
Behold the Cadillac of the T's.

Robert Godby, co-owner of this unique custom T Hangar built by his now retired millwright brother, Thomas, greeted me as my vehicle came to a stop next to this magnificent structure.

Really no larger than the other standing T hangars extending in a line but the only one constructed of structural steel and opened up much like a clam to receive the aircraft and function as a really large sunshade for a workshop.

From the creative mind of his brother, a structure like this is truly one of a kind. Sorry no plans, and no further application are offered to any interested party.

Yet, without pressing, Robert was very approachable as questions spewed forth while he was trying to accomplish a task in progress before I had even arrived.



Several jackscrews had been utilized to level the T and even they are mounted on farm plates as ground footings.

Just before we broke for the weekend lunch the Tillsonburg Flying Club hosts, Roberts saved the best details for last.

How did this all come to be, with no electrical power other than a small generator and how would you move it? You wouldn't I thought. It's permanent.

Quite the contrary Robert said with a smile.

Fabricated offsite in 5 bolt together sub-components, all with axles to slide in at various bearing hard points, in other words, all road worthy and hauled as legal trailers.

If the brothers decide to move their Cadillac of the T hangars, the only thing to show where once it stood, would be a grassless patch and the pressure points of support plates.

Two large industrial hydraulic cylinders work in unison to open and close the split structure. They operate by a small 12 volt pump, that seems oddly out of place for such a lift function along with a couple of 12 volt car batteries that are trickle charged by two exterior mounted solar cells.

Naturally, when the hangar is open, the pleasant weather can be enjoyed but when closed up, the installed skylights still give the brothers a nice feeling of openness. A man door allows for entry at anytime.

Another innovation is the hydraulic winch with a cable attached dog to haul their tail dragger back inside onto two movable ramps. The whole structure sits off the ground several inches, sealed away from vermin and entry of water.

Above: Some of the hydraulics that open the T's massive door (mouth?). Right: Open wide...

Oil Caps

WHEN SMOKE IS SMELLED in the cockpit it focuses the mind wonderfully. Fortunately this was just some oil that had oozed past the dipstick cap gasket, not that uncommon on some Continentals that have the short filler pipe. The cure is a new two dollar gasket from Spruce, PN 05-01059.

To install the gasket it is recommended to dismantle the dipstick from the cap. The dipstick base is spring loaded so it is necessary to push it down to disengage the four tangs, and then rotate 1/8 turn to align the tangs with the four slots.

Below the dipstick is a cone-shaped spring that presses against a cup that has the two ears that engage the filler pipe. Remove the spring and the cup and have a close look at the backside of the ears to see if they have been heavily scored by too many years of use. If the ears break off they will fall into the sump and the cap will pop off, allowing oil to be splashed around the engine compartment.

If the tangs are still in reasonable shape you can just replace the gasket and reassemble the spring etc. If anyone knows where to find replacement cups please email to raa@raa.ca or call 1-800-387-1028.

Top Down: a typical Continental oil cap - this one has a leaky gasket

Press in and rotate 1/8 turn to release the dipstick assembly, revealing the spring and the tang cup.

The five parts that comprise the dipstick assembly. The tang cup has been flipped over to show the working surface.

The Tillsonburg Flying Club is a non-profit collection like minded pilots, builders and amateur enthusiasts who enjoy flying activities and fellowship during decent flying weather in southwestern Ontario.

The club aircraft, a modified Champ registered as an ultralight can be booked for $90 wet by qualified pilots with the payment of $150 membership fee, or a individual can enjoy the clubs activities and meetings for a mere $50 per year. Flying instruction is also available from certified flying instructors. The nice thing about this club is the tail dragger instruction that supersedes any future endorsement if the applicant was to get the customary nose wheel instruction first.

The typical Saturday afternoon lunch of a $5 burger and soft drink is well received by the members and guests.

Further information of the TFC or contact with the members can be found at www.tillsonburgflyingclub.com

President's Message / cont'd from page 2

need to deal with returning business aircraft to Transport's control, and of course SMS (Safety management Systems).

During this period anyone wishing to import a Light Sport aircraft has usually been directed to register as Advanced UL if it met those requirements or else to register in the Limited category.

Transport Canada has in the past months been meeting with the FAA to find if there have been problems with the US Light Sport category, and TC intends shortly to begin the procedure to incorporate LS into our regulations. In this case "shortly" means the fall of 2013. This has been promised several times before by a previous administration but this time it might be for real.

Transport Canada has also made a change to the administration of the UL categories, placing them under Part V, Maintenance and Manufacturing. This is an improvement because M&M has a greater interest in airframe safety issues. It might surprise you to learn that neither Basic or Advanced UL aircraft have never been required to have a weight and balance to be allowed to fly. RAA has long been asking that all aircraft be required to have a valid W&B -they are subject to the same laws of physics as other aircraft, and this recent change might make this possible.

Chapters / continued from page 21

most of the Brandon participants from attending. Harvey McKinnon, Brandon CATP Museum Pilot, explained that the Museum had three flying airplanes – Cornel, Stinson and Harvard…and one day the Tiger Moth will be added to the flying vintage fleet!

This Tiger Moth was built in 1938, last flew about 20 years ago, and has been on static display inside the hangar ever since. It is now being restored in a joint project with Brandon and Winnipeg area RAA Members. Tom Phinney and his son have volunteered to be the AMO: Fabric and Wood for the project, Ted Hector has volunteered to be the AME. Volunteers working on the project include neighbours, experienced builders, and pilots. Gerald Ricard, Transport Canada, is providing advice needed to ensure the paperwork is all brought into order. His colleague, Garnet Fedorowich, Transport Canada, is familiar with this Tiger Moth, he was working in Brandon when it first arrived at the museum about 40 years ago and has followed its repairs and uses with interest. Garnet has been invaluable helping recover some of this history. Bill Gibson drops in regularly with precious insights. Bill actually flew this Tiger Moth many years ago and has brought in invaluable documentations on rigging specifications! Neil Davidson, a re-known vintage aircraft restorer from BC, has provided a microfiche filled with rare drawings, which the University of Manitoba is in the process of copying for the museum. Neil Davidson and the Tiger Boys from Guelph, generously share their many decades of experience working on Tiger Moths, and other antiques, from around the world with us as we slowly uncover questions as the restoration process proceeds.

In preparation for the Tiger Moth rib building workshop, Gil Bourrier created four jigs, two for aileron ribs and a 2-part jig for making wing ribs. Gil began by fitting a stiff piece of cardboard over the spars and wires so he could trace around the entire full-sized rib…with that classic cambered lower edge that the Pietenpol builders recognized in their own projects. He mounted this pattern on a sheet of plywood, covered the pattern with clear plastic, and then strategically positioned spacers and clamps to guide and hold the cross pieces and cap strips in place. The clamps were round pieces of wood screwed onto the plywood so they could be rotated to press the cap

strip tightly into position.

Before beginning to build a rib, a collection of vertical and diagonal braces need to be cut from 1/8" thick spruce. Braces are placed in about seven positions along the rib. The brace for each position is a different length and the angle of the cut at the top and bottom is unique…good idea to cut a whole bunch simultaneously; so all the braces for one station are identical. Spruce cap strips and gussets are also prepared in advance.

Once all the pieces are prepared, some two-part epoxy glue is mixed and the braces are glued to the upper and lower strips placed in the 1st jig. Cap strips are placed in the jig as spacers; cap strips aren't glued at this point. Once the glue is set, the partially constructed full-sized rib is removed and placed in the 2nd of the 2-part jig designed to hold the cap strips while they are being glued in position. A 2-part jig was needed because the Tiger Moth rib design has a 'T'-shaped cap strip with braces added to both sides of the 'T'. Participants took a close look at the jig and actually tried fitting in the pieces to understand why everything wasn't just glued at the same time in one jig.

Larry Brown then helped point out some of the highlights visible in the lower left wing currently being repaired. The all wood structure is braced with steel drag and anti-drag wires. The wires are attached to an adjustable eye with a hand spun coil of steel! This coil is made by hooking the steel onto a lathe, spinning the lathe a few turns, and then slipping it over the drag or anti-drag wire! The aileron control rod is moved with a basic bicycle chain, with a handmade fitting attaching the chain to the control cables. A bicycle sprocket is connected to the aileron control rod, just like a pedal on a bicycle! It works extremely well, even after 70+ years of service!

A few of the ribs on the lower left wing were broken, splintered, or loose. Over the last month or so, cap strips have been soaked in steaming water, clamped to a mold and allowed to dry into the original shape of the rib nose. Once the piece is dry, it is then glued into position, clamped, and left until dry. This process is repeated, one rib at a time, and slowly the wing is returning to its original airworthy condition. Straightening and re-gluing has also been completed on the leading and trailing edges of the wing and aileron. Soon both these pieces will be ready for varnish and prepped for fabric.

About half way through the evening, we got to see the lower right wing, fully covered with fabric, just as it was when it was de-assembled from the fuselage last December. One of the goals for this event was to remove the covering and begin inspecting this wing for damage that needed repairing. Wielding numerous knives, a marking pen, and camera, the entire team began removing the fabric. Carefully cutting the hundreds of stitches, making notes on the fabric which will be used as a pattern when we begin recovering the wing, and photographically documenting each section, slowly the original Tiger Moth wing was uncovered.

The spar attachment fitting was removed. Following British procedures, the nuts were 'locked' onto the bolts by bashing the last thread to prevent the nut from falling off. To remove the nuts, the last thread has to be cleaned up with a file and then the nut is easily removed with a set of British Whitworth socket wrenches lent to us by Vic Préfontaine!

The lower right wing appears to need fewer repairs than the lower left wing. The paint will be partially removed to check for any wood rot, hidden fractures, and other abnormalities. With 20 people, it didn't take long to get a lot of work accomplished. You are invited to drop in to help prepare this wing for any repairs and varnish both wings as we get them ready for fabric. March 15th, Thursday, at 7:00 pm in the RAA Workshop Final Assembly Building at Lyncrest, there will be a mini-fabric covering workshop… maybe we'll get to put the fabric on the Tiger Moth aileron and take one last look at the original data plates, handwritten part numbers, and other original documentation found beneath the fabric. One day, this Tiger Moth will be back flying amongst the clouds on a beautiful summer day over the Brandon airport. Yes, it is a two-person aircraft and the Museum is planning to allow rides! Contact jill_oakes@umanitoba.ca if you'd like to volunteer, we're working most weekends from around 9:30 to Noon with some work done in the afternoon and some weekdays and evenings. Check out the <tigermothrestoration.blogspot.blog> or go to the www.RAA.ca website and click on News to get to our weekly updated with photos and info on this exciting project. "Let's Keep 'Em Flying"

RAA Chapters and Meetings Across Canada

The following is a list of active RAA Chapters. New members and other interested people are encouraged to contact chapter presidents to confirm meetings as places and times may vary.

ATLANTIC REGION

HAVELOCK NB: Weekly Sunday morning get together year round, all aviation enthusiasts welcome. Havelock Flying Club - 25 mi west of Moncton. Contact Sterling Goddard 506-856-2211 sterling_goddard@hotmail.com

QUEBEC REGION

COTE NORD (BAIE COMEAU): Meeting times to be advised. Contact Pres.Gabriel Chouinard, 418-296-6180.

LES AILES FERMONTOISES (FERMONT): First Sunday 7:30 pm at 24 Iberville, Fermont. Contact Pres. Serge Mihelic, 418-287-3340.

MONTREAL (LONGUEUIL): Chapter 415, Meeting in French second Wednesday at 8 pm, at CEGEP Edouard Montpetit 5555 Place de la Savane, St. Hubert, PQ. Contact president Normand Rioux at NRIOUX@lapresse.ca

OUATOUAIS/GATINEAU: Every Saturday 9:00 am to noon at the restaurant l9Aileron in the airport terminal. Contact Ms N.C. Kroft, Gatineau Airport, 819-669-0164.

ASSOC DES CONSTRUCTUERS D'AVIONS EXPERIMENTAUX DE QUEBEC (QUEBEC): Third Monday 7:30 pm at Les Ailes Quebecoises, Quebec City Airport.

ASSOC AEROSPORTIVE DE RIMOUSKI: First Saturday at 9:00 am, La Cage aux Sports, Rimouski. Contact Pres. Bruno Albert, 418-735-5324.

ASSOC DES PILOTES ET CONSTRUCTEURS DU SAGUENAY-LAC ST JEAN: Third Wednesday 7:00 pm at Exact Air, St Honore Airport, CYRC. Contact Marc Tremblay, 418-548-3660

SHERBROOKE LES FAUCHEURS de MARGUERITES. Contact Real Paquette 819-878-3998 lesfaucheurs@hotmail.com

ONTARIO

BARRIE/ORILLIA CHAPTER Fourth Monday 7:30 PM Lake Simcoe Regional Airport Contact Secretary Dave Evans 705 728 8742

E-mail david.evans2@sympatico.caCOBDEN: Third Thursday 8:30 pm at Club House, Cobden Airport. Contact Pres. Clare Strutt, 819-647-5651.

COLLINGWOOD AND DISTRICT; The Collingwood and District RAA, Chapter 4904, meets every first Thursday of every. month, at 7:30 PM except July and August, at the Collingwood Airport or at off-site locations as projects dictate. The January meeting is a club banquet held at a local establishment. For more information contact Pres. George Elliott gaelliott@sympatico.ca 705-445-7054

EXETER: Second Monday 7:30 pm at Summers-Sexsmith Airfield, Winters-Exeter Legion. Contact Pres. Ron Helm, ron.helm@sympatico.ca 519 235-2644

FLAMBOROUGH: Second Thursday 8:00 pm at Flamborough Airpark. Contact Pres. Karl Wettlaufer 905 876-2551 or lazykfarm@sympatico.ca

KENT FLYING MACHINES: First Tuesday 7:30 pm at various locations. Contact President , Jim Easter 519-676-4019 jim.easter@teksavvy.com.

KITCHENER-WATERLOO: Meets the third Monday of each month in the upstairs meeting room of the cadet building at CYKF, except during the summer months when we have fly-ins instead. Please contact Clare Snyder clare@snyder.on.ca

LONDON/ST. THOMAS: First Tuesday 7:30 p.m. At the Air Force Association building at the London Airport. Contact President Phil Hicks p.hicks@tvdsb.on.ca 519-452-0986

MIDLAND/HURONIA

Meeting: First Tuesday, 7:30 pm at Midland/Huronia airport (CYEE) terminal building. Contacts: President Ian Reed – 705-549-0572, Secretary Ray McNally – 705-533-4998, E-mail – raa.midland@gmail.com .

NIAGARA REGION: Second Monday 7:30 pm at Niagara District Airport, CARES Building. Contact Pres. Elizabeth Murphy at murphage@cogeco.ca, www.raa-niagara.ca

OSHAWA DISTRICT: Last Monday at 7:30 PM at the Oshawa Airport, South side, 420 Wing RCAF Assoc. Contact President: Jim Morrison ,905 434 5638 jamesmorrison190@msn.com

OWEN SOUND Contact President Roger Foster 519-923-5183 rpfoster@bmts.com

OTTAWA/RIDEAU: Kars, Ont. 1st Tuesday. Contact: Secretary, Bill Reed 613-831-8762 bill@ncf.ca

SAUGEEN: SAUGEEN: Third Saturday for breakfast at Hanover Airport. President: Barry Tschirhart P.O. Box 1238 27 Ridout Street Walkerton, Ontario. Home: 519-881-0305 Cell: 519-881-6020. Meetings are held every second Tuesday evening, at 7:30pm. Location(s) Saugeen Municipal Airport, Kincardine or Port Elgin. All interested pilots are welcome. Email: barry.tschirhart@bell.net

YQG AMATEUR AVIATION GROUP (WINDSOR): Forth Monday, 7:30 pm Windsor Flying Club, Airport Road, Contact: Kris Browne e_kris_browne@hotmail.com

SCARBOROUGH/MARKHAM: Third Thursday 7:30 pm Buttonville Airport, Buttonville Flying Clubhouse. Contact Bob Stobie 416-497-2808 bstobie@pathcom.com

TORONTO: First Monday 7:30 pm at Hangar 41 on north end of Brampton Airport. Contact: President Fred Grootarz - Tel: (905) 212-9333, Cell: (647) 290-9170; e-mail: fred@acronav.com

TORONTO ROTORCRAFT CLUB: Meets 3rd. Friday except July, August, December and holiday weekends at 7:30 pm Etobicoke Civic Centre, 399 The West Mall (at Burn-

hamthorpe), Toronto. Contact Jerry Forest, Pres. 416 244-4122 or gyro_jerry@hotmail.com.

WIARTON: Bruce Peninsula Chapter #51 breakfast meetings start at 8:30am on the second Saturday of each month in the Gallery of Early CanadianFlight/Roof Top Cafe at Wiarton-Keppel Airport. As there are sometime changes, contact Brian Reis at 519-534-4090 or earlycanflight@symptico.ca

MANITOBA

BRANDON: Brandon Chapter RAA meets on the second Monday of each month at the Commonwealth Air Training Plan Museum at 7:30 PM except in the months of July and August. Contact Pres. John Robinson 204-728-1240.

WINNIPEG: Winnipeg Area Chapter: Third Thursday, 7:30 pm RAA Hangar, Lyncrest Airport or other location as arranged. Contact President Ben Toenders at 204-895-8779 or email raa@mts.net. No meetings June, July & Aug. RAA Winnipeg info also available at Springfield Flying Center website at http://www.lyncrest.org/sfcraac.html.

SASKATCHEWAN

Chapter 4901 North Saskatchewan. Meetings: Second Tuesday of the month 7:30pm Prairie Partners Aero Club Martensville, Sk. info at www.raa4901.com. Brian Caithcart is the chapter president. Contact email: president@raa4901.com.

ALBERTA

CALGARY chapter meets every 4th Monday each month with exception of holiday Mondays and July & August. Meetings from 19:00-22:00 are held at the Southern Alberta Institute of Technologies (SAIT) Training Hangar at the Calgary Airport. Join us for builder discussions, site visits, tech. tips, fly out weekends and more. Contact president Don Rennie cgmmv.skylane@gmail.com 403-874-0876

EDMONTON HOMEBUILT AIRCRAFT ASSOC: First Tuesday 7:30 pm EAHS boardroom. Contact President Bill Boyes 780-485-7088

GRANDE PRAIRIE: Third Tuesday, Chandelle Aviation Hangar, contact Jordie Carlson at 780-538-3800 work. or 780-538-3979 evenings. Email: jcarlson@telusplanet.net

BRITISH COLUMBIA

ABBOTSFORD: Third Wednesday 7:30 pm Abbotsford Flying Club, Abbotsford Airport. Contact President, John Vlake 604-820-9088 email javlakeca@yahoo.ca

DUNCAN: Second Tuesday 7 pm members homes (rotating basis). Contact Pres. Howard Rolston, 250-246-3756.

OKANAGAN VALLEY: First Thursday of every month except July and August (no meetings) at the Kelowna Yacht Club. Dinner at 6:00pm, meeting at 7:30pm Contact President, Cameron Bottrill 250-558-5551 moneypit@uniserve.net

QUESNEL: First Monday/Month 7:00 p.m. at Old Terminal Building, CYQZ Airport. Contact President Jerry Van Halderen 250-249-5151 email: jjwvanhalderen@shaw.ca

SUNCOAST RAA CHAPTER 580: Second Sunday 13:30 pm Sechelt Airport Clubhouse, sometimes members homes. Contact Pres. Gene Hogan, 604-886-7645

CHAPTER 85 RAA (DELTA): First Tuesday 7:30pm, Delta Heritage Airpark RAA Clubhouse. 4103-104th Street, Delta. Contact President President: John Macready jmacready@shaw.ca. Website http://raa85.b4.ca.

VANCOUVER ISLAND AVIATION SOCIETY (VICTORIA): Third Monday 7:30 pm Victoria Flying Club Lounge. Contact Pres. Roger Damico, 250-744-7472.

THOMPSON VALLEY SPORT AIRCRAFT CLUB: Second Thursday of the month 7:30 pm Knutsford Club, contact President - Wally Walcer 250-578-7343

ALASKA HIGHWAY: meetings held every third Thursday of every month (except July & August) at the Taylor Fire Hall at 7:30 p.m. For more information call Gerry at 250-782-4707 or Heath at 250-785-4758.

Chapter executives, please advise of changes as they occur. For further information regarding chapter activities contact RAA Canada, Waterloo Airport, Breslau ON N0B 1M0 Telephone: 519-648-3030 *Member's Toll Free line: 1-800-387-1028 email: raa@raa.ca web: www.raa.ca*

Classified Ads

To submit or delete a classified ad, please send to raa@raa.ca and place "RAA ad" in the subject line.

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Artwork: Rates apply to camera ready artwork. Digital files are preferred and should be sent as email and in .txt format, PDF, JPEG, MS WORD, Photoshop or other common file types. Advertising is payable prior to printing of magazine unless other arrangements have been made. Payment is in Canadian funds. 10% Discount applies to one year (6 issues) insertion paid in advance. Commercial Classified ad rates 1/8 page minimum.
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The Recreational Aircraft Association Canada does not assume responsibility for advertisements, but does exercise care to restrict advertising to responsible, reliable individuals.
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Recreational Aircraft Association Canada
President: Gary Wolf / Treasurer: Wayne Hadath

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For Sale

FOR SALE KR-2 FUSELAGE in boat stage and metal kit for retractable landing gear castings $300.00 call Ian 604-856-1159 or email tri-pyramid@telus.net Dec11

PROPELLERS, wood, new, never mounted, tractor cwise (view from cockpit), priced OBO plus shipping: One 42x23, weight 2 lb., Lepper, conventional outline, 4 bolts on 70 mm b.c., $195. One 43x34, 4 lb., squared tips, 6 bolts on 75 mm b.c., $295 Call Frank, 905 634 9538

BEDE-4 FOR SALE! 380+ hours TTSN, Lycoming 0-320 E2D McCauley FP prop 75x53 2000 lb GW, 1285 empty. Murphy ext. metal wings, 30 ft with droop tips. Vortex generators, Extended flaps and ailerons. Wing fold mech. built in! Complete set of fairings - all design improvements complied with. Cessna gear legs with solid link in gearbox. Murphy type nose wheel (5x4) Towbar (2 pc) New brake discs and linings! Endura paint - 2002. Complete upholstery, adjustable seats, headliner, door panels, carpets. Instruments: A/S, A/H, Alt., VSI, Turn Co-ord., Slaved mag compass. Tach, Vac. Gauge, Cyl. Temp (2) Fuel (2) oil press., amp. meter, clock/air temp and heated pitot. King KX145 NavCom with KI205 Ind., ValCom 760, Flybuddy Loran, RT359 Transponder with Narco AR850 Encoder (mode C) Magellan GPS with expansion card/software, Sharc ELT, 2 place Flightcom intercom, 2 headsets. Maintenance records, builder manual, some spares, etc., halon fire ext. first aid kit. Any serious offers near $27,000 considered. No tire kickers please. Located CYNJ. Contact Fred Hinsch fred7@shaw.ca

FOR SALE. Lycoming 0-360-A4A. 279 SMOH c/w mags and carb. Recent prop strike inspection by Pro Aero Engines in Kamloops. Yellow tagged. New bearings, rings, gaskets, inhibited and crated, ready to ship. $15,000. Barry Holland 250-785-6431.

w-b-holland@uniserve.com

2002 CP 301-A Emeraude. First flew June 2003. TTAF 50 hrs. 0 290G Lycoming 396 hrs. since major. Sensenich metal prop inspected and refurbished by Hope Aero June 15/09. Dual controls (pedals, sticks throttle) custom interior. Annual due May 2012. Always kept in a hanger. Contact Jim Demerling 519-348-9655 (Ont.) $ 21,500.00

AVID AMPHIBIAN KIT FOR SALE $5,000 Complete kit; tube fuselage and tail, all wing parts, wheels, tires, hardware. Left wing started. No engine, no mount, no instruments, no fabric. Contact Don, located near Owen Sound, ON Telephone: 519 372-1383 . email: we3kingers@yahoo.ca

AMPHIBIOUS HOMEBUILT Floats approx 1400'S in need of modification water tight bukheads not watertight. With rigging for installation 2 rudder config Floats too small for my aircraft $6000.00 Larry Taylor 250-492-0488 days ltaylor@pacificcoast.net

THE ORIGINAL PEGASTOL aircraft built by the owners of Dedalius Aviation in 1997. Aircraft is registered as an amateur built aircraft @ 1200lbs gross weight and can be flown with a ULP. Rotax 912S x 100 HP, with slipper clutch gear box and 68" Warp Drive Propellor. Engine has 20 hours on it since coming back from Rotax (Tri-City) for starter sprag clutch replacement. The gear box was also overhauled considering it was on their bench and was done as a precautionary inspection considering it was already there. New engine Barry Mounts upon engine reinstall. New Custom aluminum main fuel tank spring 2010. New windshield and upholstery in 2009. Floats have Lake n Air pump out cups (that are rarely needed as floats are tight). 1/2" sound deadening foam throughout cabin. Wheel gear and forks also included. Airframe Total Time equals 620 hours, 912S Engine Total Time = 380 hrs, Propellor Total Time = 532 hrs, Total Time on Amphibs = 442 hrs. Has new $700 Heavy Duty starter as well. LIMITED TIME ONLY $42,000, so he can put that + winter storage fees towards a 4 place.
For more details view at www.irishfield.on.ca or send us an email oifa@irishfield.on.ca

0320 E2C currently mounted on my Osprey which could be included in sale. Osprey has 175 hrs since new engine has 1850 but was dissassembled for a propstrike inspection 200 hrs ago Compression 125 lbs cyl on all four jugs oil pressure good complete with accessories. $6000 for engine $9000 for all aircraft needs refinishing and recover Larry Taylor 250-492-0488 days ltaylor@pacificcoast.net

STITS SKYCOUPE with O-290 125 hp, 240 hrs TT. Garmon 195, Escort 110, ICOM A5, intercom, wing tanks. Located at Burlington Ont CZBA. Must sell due to financial constraints. $16,900 OBO. 905-332-7331

FRONT PORTION of RV6 Tilt Type Canopy new, covered with protective material. $60 or offer. Misc chief and champ parts. Call for details. 416-431-2009 Sep11

CHAMP FUSELAGE, ribs, fuel tank, complete tail and numerous other parts $ 1000.00 . Sprint fuselage, spars, ribs, $ 1000.00 Bill Donig 705-842-0801 Dec11

SKYBOLT FUSELAGE with Marquart Charger cantilever U/C., tail feathers, rudder/brake pedals, metal fittings, axles, wheels. Offers. Bill Phipson #3954. Phone 416-431-2009 Dec11

VW ENGINE and many parts. Engine was disassembled after 10 hours for inspection and is still open and appears to be in good condition. Engine has prop flange and one mag. Ten boxes of parts include enough to assemble another complete long block engine. Includes spare oil coolers, spare sidedraft carbs, and there will still be parts left over. Located near Hamilton ON w.brubacher@sympatico.ca Dec11

SPORTSMAN 2+2 PROJECT FOR SALE ; owner has passed away. This is a nice four place super-cub style amateur built suitable for short field work or floats. Nicely welded fuselage is painted and almost ready for cover.Wings are all aluminium structure and almost ready for fabric .Most airframe parts included . No motor, prop or instruments.Call Richard 705-652-6307 $17,000. OBO.

FOR SALE: Zenith CH601XL , airframe 80% complete, controls installed. Canopy mold. No landing gear. Subaru 2.2L no redrive. $3000 or best offer. Call 705 279 4399 or 519 351 6251

MANY PARTS from Dave Johnson and Crossflow Subaru belt redrives including shafts and prop flanges, bulkheads and separators, bearings in their housings, also starter mounts, but no gears. If you are a national member and you need parts and show up on a Wednesday morning, they are free. If they must be boxed and shipped there will be a charge for this. garywolf@rogers.com 519-648-3030

EUROPA XS monowheel with Rotax 914 turbo engine and Airmaster constant speed prop, 87 hrs total time. VFR panel with Mode C transponder, KMG GPS, Becker

720 com with intercom and headsets. This is a fast and efficient cross country aircraft with low fuel consumption. Asking $65K, no reasonable offer refused. Contact Hazel Peregrym at 250-672-5587 snowgoose@telus.net

ZENITH TRI-Z CH300-1983. Lyc. O-320 Sensenich prop,ICOM 2000/intercom. Nose wheel mod. Toe Brakes. Nav/Strobes/Bcn. TT 273 $19,500. albanus@rogers.com 905-686-7546

ZENITH CH300 for sale First flight 1990 265 hours TT airframe and engine. Lycoming O320 E2D 150 HP engine professionally "zeroed" by Leavens aviation with all documentation. New McCauley cruise prop installed 3 years ago (cruise all day at 135-140 mph on 8gph). Professionally painted by flying colours in peterborough..$10,000. New sliding tinted canopy installed 5 years ago..flawless..with no cracks.

New interior installed top to bottom..seats..doorskins..panel..dash ect. Full IFR steam gauges. blue mountain EFIS light. 3 axis auto pilot. True Trak pictorial pilot AP coupled to Garmin 396 to track a flightplan or approach..super accurate. Truk Trak Altrav VS altitude hold with verticle rate..aircraft can be flown hands off from takeoff to short-final….trust me ive done it…..amazing amazing unit!

Flo scan fuel management system computer with opitical transducer….super accurate... with fuel remaining...fuel used….endurance for given power setting and of course fuel flow. King digital 720 radio. Narco mode C transponder with encoder. Ammeter and Volt meter. 4 place intercom for front and back seat headsets. Full lights inside and out for night flying. New tires 2010.12 volt recepticals front seat and back seat for PAX. Reiff full pre-heat system for winter operations..(oil pan heat and cylinder bands for each jug..very effective). Air Wolfe remote oil filter system installed for 50 hour intervals and added engine protection.

New Marvel carb installed 2007. All builders logs and plans..complete journey and tech logs..all owners manuals and professionally produced POH documenting every aspect of aircraft operations as well as placarded checklists. Always maintained to highest standards…$ 35,000….(certified and e-tested!!). I would have no qualms selling this aircraft to anyone…..a joy to fly. Warren 289-259-6460

CAVALIER 102.5, "Aero Sport Power" O-320-B2B; 152 TTSN. Sensenich metal prop. Airframe was totally rebuilt in 1997; 1750# GW, 622 lb useful load; VFR instruments + Garman GTX 327 TXP Mode C & Val Radio; Trutrak Turn & Bank; Kept in heated hangar; 8/10 inside and out. $28,000 or would consider trading with another aircraft. cavalier102@uniserve.com or 250-558-5551. Ask for Cameron.

TEAM AIR BIKE; 2 Seater Tandem, unfinished; fuselage complete. HKS Engine (New) 55 Horse. 3 Blade Prop Adjustible. All Instruments; Sitka Spruce Wing Material, wings not built yet. Best offer over $!0,000.00

Contact Dave Gladman; to view dgladman@cogeco.ca

LONGEZE PROJECT with all major fibreglass work completed. Main wings and canard have been matched with the fuselage. Baggage /fuel strakesare complete. There is also a Lycoming O-235 engine available. Work remaining includes elgnine mount, instrumentation, prep and paint. j.f.doyle@shaw.ca

ENGINE - LYCOMING 0-320 A3A, 968 SMOH, to remove from flying a/c. $9000. 905.878.4017, mohne40@yahoo.ca.

TWO NEW 600-6 CLEVELAND WHEELs complete with brake discs and hydraulic pucks. 1.5" bearings included. New tubes and Mallory Airhawk tires 600-6 type 3, 6 ply. Selling for $240 per side. Complete front landing leg and engine mount including oleo and nosewheel with tire from 65 Cessna 150, not damaged. This has been sandblasted and undercoated. $400. O-200 Continental starter, cable type with 60 hrs since major. $100. Carb airbox for O-200, $40. 403-545-2609 in Bow Island, west of Medicine Hat.

SUBARU EA81 ENGINE with 30 hrs and logs, plus brand new Karlo Keuhner Redrive. 2.4:1 ratio. SAE 1 pattern same as Cessna 150. Holley carb, dual ignition with two pickups in distributor. 4500 engine max rpm, cruise at 4000. $2500 OBO. 705-747-0876

Bowers Fly Baby, Continental 85, 350 TT on engine and airframe. Always Hangared, flown regularly, owner built. Fun, affordable flying, $12,000. Phone 403-614-3855 or email, jw.gray@shaw.ca

MINI-MAX. TTSN 220. 31 hrs since ROTAX 440 and GSC prop overhaul. Always hangared VG condition. ICOM Nav/Com. Medical forces sale. $9,900.00 OBO.
780-460-6841 or cell 780-945-0411

COLIN WALKER Prop. New, never flown. 68 X 58. $290.00 plus shipping.
780-460-6841 or cell 780-945-0411

C85/C90 Starter and Stromberg carb for same. $250.00 each plus shipping OBO.
780-460-6841 or cell 780-460-6841

CHINOOK Factory built in Edmonton 1983. Out of long term storage. Good sails in original color scheme. All oiled and inhibited for storage. Very low hours suspect < 20. VG 54" prop. $4990.00 OBO
780-460-6841 or cell 780-945-0411

Ads run for a maximum three issues depending on space available and then must be renewed for continued display. Please direct all classified inquiries and ad cancellations to: raa@raa.ca and place "RAA ad" in the subject line.

Coming Events

Delta Pancake Breakfast
Second Sunday of each month - Delta Heritage Air Park, Vancouver. Monthly fly-in pancake breakfast by RAA Chapter 85 and DAPCOM. Air Park location is in the CFS. Full breakfast for $4. Breakfast served from 9am until the food is gone or 11am, whichever comes first.

RAA Chapter 85 Fly-In
June 30, Delta Heritage Airpark, Delta, BC

Les Faucheurs de Marguerites
Sherbrooke airport, June 30th and 1 July, les Faucheurs de Marguerites, For more information, visit their web site at: www.lesfaucheurs.com

Saskatoon 6th Annual Fly'n Fair
It's time for the 6th Annual Fly'n Fair event on June 30 & July 1st at Corman Air Park (CJN5) in Memory of Vern Rees. Come out and enjoy the planes and antique tractors also on display, concession and the easy relaxed atmosphere of Corman Air Park, SK! For those pilots that choose to fly in, your breakfast is free. And don't forget the fireworks on the evening of Saturday June 30th, they are always a great site to see! Check out the attached poster for more info or visit www.cormanairpark.ca. See you there!

Bancroft Flying Club's Annual Fly-In Breakfast
July 8, Bancroft, ON (CNW3): COPA Flight 119, The Bancroft Flying Club's Annual Fly-In Breakfast from 8:00 a.m. to 12:00 noon. For more information please contact Bob Pearson 613-332-0400 or email at at bob.hella@sympatico.ca.

RAA Chapter 4928 12th Annual Kars 'n' Planes Summer Fly-In BBQ
July 15, Kars Rideau Valley Airpark (CPL3). Comm 123.4 RWY 26/08 Glider activity in area. Homebuilt, Classic and Antique Aircraft, Rideau Valley Soaring Club, Model Aircraft displays, Vintage Cars, Swords and Plowshares Military Museum. BBQ served from 11:00 a.m. until 2:00 p.m. Sausages on a Bun, World Famous steamed Hotdogs and assorted beverages. PUBLIC WELCOME. Dilworth Road just East of Highway 416. For more information, please email Dave Stroud dstroud@xplornet.com.

Calgary RAA Annual Breakfast
The RAA and the Cu-Nim gliding Club are having our fly-in/drive-in breakfast again at the Cu-Nim Gliding Club Airport (CEH2 Black Diamond) on August 25, 2012. Approximately $7 per plate. Last year we had about 10 planes fly out, let's beat that this year. Overnight camping facilities! Several people came out Friday and camped over.. There will also be discount gliding again. Don't miss it. See the ad in the Chapters section for more information!

Send us Photos of your completed projects !

Share your accomplishment with others - you've earned it! Please include a brief description of your aircraft and any other details you want to include, and send us a colour print with it. Mail to: Recreational Aircraft Association of Canada Waterloo Airport, Breslau ON NOB 1M0 ...or email us the information and a high resolution digital picture (jpeg format please) to: raa@zing-net.ca

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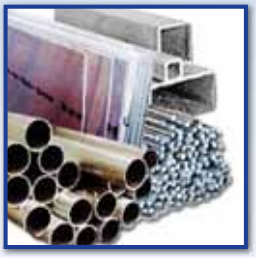
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