



Skywriter

Monthly newsletter of the Calgary Ultralight Flying Club - COPA Flight 114

February 2003

From The Cockpit

by Bob Kooyman

This month I'd like to carry on discussing a topic I started last month, progress in sports aviation development. One area of sports aviation that is crying out for attention is new developments in engine technology. As our planes continue to grow in the Ultralight Category, we are placing increasing demands upon the engines. When Ultralight aviation first began 20 year ago with aircraft like the Lazair powered by 2 ea. 9 hp direct drive engines. These grew into the 40 hp Rotax 447 and 503 2 cycle engines used on the MiniMax/Himax and Kolb. The 40 to 60 hp engines are now metamorphosing into the 80 to 100 hp engines installed into the newest generation of light two seat sports planes like Andy's 912 in his Merlin.

Engines are a technology that cries for development. The two stroke engines currently in use are not up to the job we ask of them. In the last year, at least five club members have had engine failures resulting in off field landings. About once per year a club member has extensive aircraft damage as a result of engine problems.

Traditional aircraft engines have remained static for 30 years. They are heavy, use out dated technology and have low power to weight ratios. It is interesting to look at the differences between traditional and non-traditional aircraft engines. Here is a comparison:

Engine	Cont IO-240	Rotax 912ULS
Displacement	240 cu in	82.6 cu in
# cylinders	4	4
Compression	8.5:1	10.5:1
Power	95hp@2550	95hp@5500
Weight	246lbs	140lbs
Fuel Consumption	6USG/hr	6.5USG/hr
TBO	2000hrs	1200hrs

The Rotax comes with dual CDI ignition and an alternator. The Continental has magnetos and generators standard. Alternators and electronic ignition are third party upgrades.

When I review the Teledyne Continental and Textron Lycoming websites, I come to the conclusion that new sports plane engines are not going to come from these manufacturers. Both companies have invested heavily into a traditional engine and into bigger is better. Both companies are stretching the limit of available materials to build higher horsepower engines for conventional airplanes. Teledyne Continental's recent crankshaft woes show the limits they are reaching. Neither company makes a 65/85/100 hp engine that would fit onto a sport plane.

Where will they come from and what will they look like?

I know they won't be turbine engines. Small turbines have lousy fuel consumption. Besides, Transport prohibits them at this time.

The current crop of automobile derivative engines also have problems. Most are too heavy. For example Stratus / Subaru E-81 engine is 200 lbs. for 100 hp @ 5400 rpm. Durability is a challenge where automotive engines are asked to run in aeronautical

environments.

They won't be two cycle air-cooled. The cooling and lubrication problems are just too great.

They might be Wankel rotary engines. The current crop of Mazda 13B engines are small and light but are a bit thirsty and have some heat dissipation problems.

They might be something like the multi-cylinder engine Doug Fortune showed last year, but most of these engines are still too early in their development cycle for aircraft use.

They likely will be piston engines with modern design, modern materials, and modern engineering like computer ignition and fuel injection. Hopefully, the reliability will also be built in. Here is an interesting engine just beginning to ship: <http://www.aerotwinmotors.com/>.

Lastly, they might be diesels. The new Volkswagen TDI diesel as excellent fuel economy, performance and weight. Several diesels are under development and beginning to appear on the market. The new Diamond Twin will be powered by diesels. Currently, these engines are designed to compete with conventional 200+ hp. aero engines but before long I can see smaller units appearing.

If you want to do a bit more engine research on you own, start with the links off this site:

<http://www.landings.com/landings/pages/engines.html>

For Sale

Aircraft circuit breakers - 14 in total, would like to sell as a set. Viewed at: <http://www3.telus.net/public/marlysp/> Gerry MacDonald 275-6880. (02/03)

Challenger II - 1998 Quad City Challenger for sale, AULA, professionally built, excellent condition, 503 DCDI, electric start, always hangered, 140 hrs TTAF, Stits-Superthane urethane paint, large wheels, heater, all upgrades, logs and records \$27,000 OBO. Allan Botting 403-241-9166 or bottinga@shaw.ca (02/03)

Rotax 503 - Dual carbs, single ignition, 60 hrs since overhaul, electric start, \$2500. Peter Wegerich 403-861-7148 or wegericp@telusplanet.net (12/02)

Ragwing Special - plans, fin, stab & rudder built, ribs for top wing built, sitka spruce for longerons and spars, glue and metal parts. \$500. Dave Dedul 403-823-2214 (11/02)

VP2 - C65, 200 TTEA, homebuilt, 1982, new paint & graphics, new crank seal and engine gaskets, brakes, compass, slip indicator, VSI, Tach, ASI, Alt, Oil press/temp, CHT, antenna, \$12000 OBO. Dave Dedul 403-823-2214 (11/02)

MiniMax 1600R - 85 TTSN, Rotax 503DC, dual CHT/EGT, wing tanks, strobes, cabin heat/air, all speed fairings, steel Eros landing gear, always hangered, beautiful plane, \$15,000. Guy Bishoff 403-320-1768 or email: gtbishof@telusplanet.net. (11/02)

Parts - Lyc. and Cont. alternators, starters, generators, regulators. All new or overhauled, some certified, 85-100HP, 115-150HP. Cessna tail dragger skis, Fluidyne A2000A with rigging for Cessna 150. RV6 tail feathers, completed. Larry Motyer 273-7023. (09/02)

Piper Vagabond PA17 - 10hr since total rebuilt, Continental A65 10 hrs STOH, \$25,000 OBO, Glen Clark, (403) 279-1036 (07/02)

COSMOS Phase II Trike - 1997, loaded with extras, 582 Rotax, 6-blade prop, 14.9 wing, electric start, trailer, high-speed/two-step floats (new), BRS900. Hangared, immaculately cared for and maintained only 200 hours. \$25,000 OBO. Call Ted Matthews (403) 722-3810 or trmatt@telusplanet.net (07/02)

Kolb Firestar - Single seat ultralight, excellent condition, good panel, Rotax 447, 160 hrs TTAE. 10 minute wing fold for easy storage. Complete with enclosed trailer which can be used as a hangar. Asking \$15,000.00 For details and pictures contact Andy Cumming (403) 380-6291 or flivingac@hotmail.com (05/02)

Propeller For Sale: 2-Blade wood, 68x32 tractor for Rotax 503DC. Leading edge protection, 60 hours TT, great condition. \$350 CDN, obo. Includes bolts and mounting plate. Call Stu at (403) 255-6998 or e-mail ssimpson@telus.net for pictures. (02/02)

Super Koala - Rotax 503, DCDI, Culver wood prop. Airspeed, Altimeter, Tach, CHT, EGT, Hour meter, Fuel gauge. Heated cockpit. Less than 200 TT on new engine and airframe. This is an attractive, predictable and easy to fly taildragger. Open to any serious offers. Dale (403)293-3826. (01/02)

Notice: Classified ad are free to CUFC members. Call Bob Kirkby to place or renew your ad 569-9541 or email to bob@skywalker.ca

Ads reprinted from the St. Albert Flying Club Newsletter

Team HiMax - licensed as a homebuilt, 40hp Zenoah twin 2 stroke, full electrics, brakes, radio, skis, 70mph cruise, 11 gals, ELT, \$11,500. Dan Pandur 780-418-4159.

GSC 3-blade prop - for 912 hub, tractor,

66" with tapered tips, leading edge protection, 30hrs, cost \$650 new, \$450. Dan Pandur 780-418-4159.

Rotax 503 - mag ignition, single carb, electric starter, 60hrs SOH, \$3,000. Dan Pandur 780-418-4159.

Biplane - wings and fuse, no undercarriage, Continental A65 not mounted, no prop, needs paint, located Cooking Lake, \$6650. Tom Schroeder 780-922-1212.

Zenair 601 UL - Jabiru engine, 100hrs, 500 TTAF, good radio & intercom, fresh annual, 100mph on 3gph, 5hr range, Dave 780-459-8535 or 458-8324.

Continental O-200 - Key start with logs. Certified. 800SMOH. Dan Pandur 780-418-4159.

Rotax 503 - DCSI, rebuilt, A-drive, offers. Dan Pandur 780-418-4159.

Skywriter

Skywriter is the official newsletter of the Calgary Ultralight Flying Club and is published 12 times per year. Forward your articles and letters to:

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Calgary Ultralight Flying Club

Meetings of the Calgary Ultralight Flying Club are held on the second Thursday of every month, except July and August, at 7:00 pm, at the Northeast Armoury, 1227 - 38 Avenue NE.

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Visit the CUFC web site: www.cufc.ca

Real Men DO Fly GPS

by Brian Vasseur

This Christmas I was surprised to find that Santa brought me a Garmin GPS 76 for my stocking. Clearly a lot of time was spent searching for the right unit, the GPS 76 is an ideal solution for aviation use. Although it's advertised as a marine unit it has just about every feature you could want in a handheld. The unit comes standard with a PC interface cable allowing you to upload waypoints, routes and tracks as well as Garmin map data. All of this for about \$350. Clearly Santa thought I was a good boy, I feel bad that all I got her was a card and a book!

There are three variations of the GPS 76, the base 76 that I have, the 76S which contains a solid state compass and barometer, and the GPSMAP 76 which has a lot more memory and allows downloading much more map detail. The barometer in the 76S would be useful on a boat where you want to know what kind of weather to expect, and the compass instantly displays the direction you're facing. In the case of the base 76 you can get the same functionality by moving 10-15 feet in a particular direction, the GPS will immediately display the heading you are following.

The GPS 76 has 5 main screens, 8 control buttons and a centre rocker switch. The unit is also backlit allowing good readability at night. Other than the power button the only buttons you'll normally use are Page, Menu and Enter as well as the rocker in the middle. The 5 main screens are

1. Satellite strength which shows satellites being tracked, signal strength, location, speed, altitude and accuracy. Typically I see accuracy within 25 feet. From this screen you can also enter Simulator mode which allows the GPS to

function as though it is receiving satellite data, and allowing you to set a speed and course to make it appear as though the GPS is following your preplanned route. A very useful feature while you're learning how to use all the available functions provided.

2. Moving Map shows a map view of your journey with a snail trail, waypoints and projected course. If you have map data loaded it will also show towns and cities in your vicinity. The zoom feature allows you to see the map in any detail that you would like. Roads, etc. are not displayed on this unit (you have to purchase the GPSMAP 76 for this) however if you have pre-entered a route this will be plotted out for you. This screen can also have up to 9 fields of customizable navigation data such as altitude, speed, heading, course, bearing, ETA, etc.

These 9 fields can each be changed to show 1 of 28 possible items. You can also cut back on the number of fields displayed to provide more space for the map, or just go to full screen map if you prefer

3. Compass screen is very similar to the moving map screen except that the map portion is replaced by a large card style compass. This is a useful screen for people like Stu who are a little uncomfortable with modern technology and prefer just an arrow to show them where to go.

4. Highway mode projects a road for you to follow, much like looking out the window of a car. Waypoints or cities show up as signs in front of you.



This is a useful screen if you wanted to keep very close to your planned course such as following an airway. You can zoom in enough that it will show you less than 100 feet off course.

5. Active Routes is where your flight planning comes in. You start your flight planning by entering Waypoints.

Waypoints are a LAT/LONG location, Name, Comment, Altitude and Depth (it's a marine unit) and proximity. If found the Depth field a useful place to store radio frequencies. Proximity allows you to set a radius around a waypoint. I've used it to set a 7NM proximity around YYC which is displayed as a ring on the map. This ensures I don't inadvertently fly into controlled airspace.

Once you have entered your waypoints you enter routes. Routes are a sequence of waypoints. You can enter up to 50 waypoints on a route and up to 50 routes at a time so you can plan a very complex flight plan. These can be entered via the keypad or downloaded from your PC (a much better idea).

Once you're ready to go the GPS automatically saves your progress as tracks. Tracks are a log of where you've been, also referred to as snail trail. This GPS allows you to download your tracks so you can playback your flight on your PC later. I've made a log driving to work and back, and it's possible to see what lane of Deerfoot I was driving in. Really cool stuff.

Some of the other features of the GPS are (continued on page 4)



Garmin GPS76

Real Men - continued from page 3

Sunrise, Sunset as well as hunting, fishing and tide schedules. This isn't something you'd use often but it's nice to have.

The setup menu is loaded with options allowing you to configure the GPS to do just about anything you would want. Altitude can be feet or meters, distance can be Statute, Nautical miles or Kilometers. Direction can be set to true or magnetic, with automatic magnetic variation. You can preset alarms to tell you that you're close to a waypoint or proximity zone or off course, set to either a time or distance value.

Having a data interface built into the unit is an extremely valuable feature. In addition to Garmins MapSource product (about \$80) there are a number of free downloads that you can use to display moving maps, export or upload waypoints, routes, tracks and maps. A data interface is a must have feature. It significantly adds to the functionality of the unit and makes it a lot easier to do flight planning.

If you have a laptop then many of the software packages will display the GPS data on top of the map on the screen. This allows you to have a detailed map in front of you on a big screen and allows you to see details that just wouldn't be available on the small GPS screen. While taking your laptop in the airplane may not be workable in all cases it would give your passenger or copilot something to do on the long trips.

For the price I think this is one of the best units that you could pick if you're looking for a GPS. The aviation models have a lot of neat aviation features, but at 3 to 10 times the price of the GPS 76 it's a big stretch to try and justify them.

While I haven't had the unit long I've already noticed a difference when I go flying. I feel a lot more confident going to a new location or trying to find a new airport because I now have something to backup my maps and navigating skills. It's also a lot easier to notice wind drift, something that's not always obvious if you're not following roads. If you've put

off buying a GPS because you just didn't know what was best then take a good look at this one. The manual is free for download, the link to the website for this GPS is below.
<http://www.garmin.com/products/gps76/>

Keeping Time

by Ed D'Antoni

Looking for a good aviation timepiece for under \$30? Try the Casio Auto Calendar.



It has 3 separate time functions. The Face can be used as local time. A digital

display below can display two entirely different times. One can be Zulu and the other any time zone you choose. The watch also displays date and has all the common stopwatch features as well as alarms.

The watch is available in most any store that sells Casio Watches. I picked mine up for only \$17.00 in a Portland Target store. I have seen them at London Drugs in Calgary for \$29.00

Annual Draw Winners

Congratulations to our annual draw winners:

ICOM A5 - Garrett Komm

Harvard wind vane - Stu Simpson

Thank you to Elmer Dyck for building and donating the Harvard wind vane.



Joe Colborne's Pober Pixie
Powered by an 80hp Continental
Complete in February 2000
Registered in Ultralight category

COPA News

by Bob Kirkby

I have been asked to clarify the insurance coverage that is now provided to the club as COPA Flight 114. Adam Hunt, COPA Member Services Manager, recently copied me on an email in which he explained the insurance and a number of other benefits COPA Flights receive. He did it so eloquently that I am reprinting parts of his email below. Adam happened to be addressing the homebuilt category in particular, but his comments apply equally to the ultralight category.

1. Insurance - COPA provides \$1M liability insurance for all your events, except "air meets" (fly-ins) which have a \$5M limit (with \$1M on food and beverage service). The policy covers all members of your COPA Flight (members, executive) against liability and also covers any volunteers as well (that means that if your spouse comes out to cook burgers at a fly-in then they are covered too). There is no notice required for this coverage to be in effect, the event just has to be a COPA Flight function. I should point out that the insurance does not cover accidents that involve aircraft - if someone gets injured in an aircraft or gets hit by an aircraft the owner's mandatory insurance provides coverage there. The insurance also specifically excludes airshows!

COPA does not levy a fee for covering all local COPA Flight members for insurance and we are committed to not levying a fee for this. In fact we don't collect money from the COPA Flights for any purposes. The insurance policy is one of the great reasons why we have 91

active COPA Flights in Canada right now!

2. The main benefits of becoming a COPA Flight other than the insurance coverage are the communications. Being a COPA Flight gets you plugged into the largest aviation association in Canada! We publish your news in our paper and in our Internet NewsFlash monthly. You get a free 1/4 ad in COPA Flight each year for promoting whatever event you like.

When you have local issues with airports or local government you have the advantage of 17,000 national members behind you and support from COPA HQ with those battles. COPA Flights have made great strides in dealing with local issues - from getting cell phone towers in Saskatchewan relocated to helping save the Toronto Island Airport!

Basically we are your national body with the fulltime staff to deal with issues from a national perspective and the local Flight is COPA's "eyes and ears" in the community.

COPA represents all forms of personal flying. We regularly carry articles on our website and in our paper on certified aircraft, homebuilts, floatplanes, helicopters and ultralights. We also do work in areas that concern balloons, gliders and even parachuting and hang gliding, too.

We really believe that aviation is "one community" and has to survive together or not at all. We have never been prepared to "trade away" the rights and privileges of one facet of aviation to benefit another sector.

3. COPA directly represents all facets of powered flying to government - certified aircraft, floatplanes, ultralights and homebuilts. COPA has always been strong on representing the interests of homebuilders. I was personally the only member of any pilot's association that attended a CARAC Part V M&M meeting where changes were made to the 51% rule last year - in most cases the other associations that claim to represent homebuilders just don't show up at the meetings where these policies are discussed and decided.

The new rules allowing the importation of amateur-builts was a COPA initiative - one that was opposed by RAA at that CARAC meeting in June 2002.

The sad fact of life is that doing a good job of representing any facet of aviation at CARAC where the CARs are made requires fulltime staff here in Ottawa. Attending all nine CARAC Technical Committees, plus many CARAC working groups, plus doing the background work to be prepared for those meetings just cannot be done without fulltime staff here in Ottawa.

As we have done for many years COPA will continue to represent homebuilders to the government at all levels and especially at CARAC.

Yours truly,
Adam Hunt



Troy Branch and his new Avid Speedwing



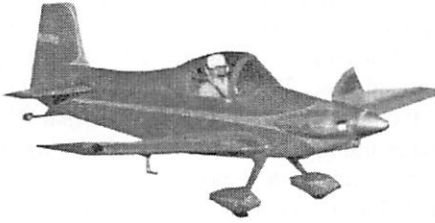
The Avid Speedwing with wings folded

Photos courtesy Adrian Anderson

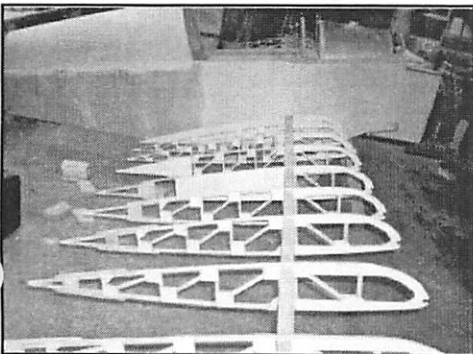
Builders' Corner

by Carl Forman

If anyone is looking for a cross-country airplane that is at home with the ultralights they should see what Dale Robinson is building. It is the single seat Corby Starlet tail dragger.



Here are the performance numbers I found on the internet. It'll get airborne in 350 feet and needs only 450 feet to land. Stall speed is 35 miles per hour. This kind of performance will easily allow it to land and take off from any ultralight strip. Cruise speed is between 115 and 130 miles per hour with top speed reported to be 160 miles per hour. There is at least one claim of 185 miles per hour top speed on an 80 horsepower engine. Climb rate is typically 1100 to 1200 feet per minute. The engine of choice is a Volkswagen conversion between 60 and 75 horsepower. With a fuel burn of 3.5 gallons per hour and room for 11 gallons of fuel, range is about 400 statute miles. The Starlet is considered semi aerobatic. With an amazing roll rate of 270 degrees per second, it will definitely require the pilot's undivided attention.



Empty weight varies between 450 and 500 pounds with a gross weight of 750 pounds. The average pilot should be able to fill the tank and still carry fifteen to twenty pounds of goodies in the storage area behind the cockpit.

Is your hangar horizontally challenged? Not with the Starlet. It has an 18.5 foot wingspan and is only 14 feet 9 inches in length. By comparison, a Minimax has a 25 foot wingspan and is sixteen feet long.

As you can see, Dale has the fuselage, wing spar and wing ribs finished. He noted that the wing spar and ribs required far more effort than the equivalent components in his first project which was a Team Minimax. The Starlet wing is designed with only one huge spar which runs from wingtip to wingtip. It passes horizontally through the fuselage. After exiting the fuselage, it curves upward to create dihedral. The spar's thickness and depth diminish from fuselage to wingtip. There are nine wing ribs per wing. As luck would have it, none are identical and so nine rib jigs are needed. Each jig builds two ribs, one for each wing. The ribs are designed so that the angle of incidence of the wing varies from two and a half degrees at the root to one degree at the wing tip. It's no wonder the Starlet takes 1400 hours to build.

Dale Robinson

Dale moved to Calgary in 1990 from east central Saskatchewan. He is a carpenter and runs his own home renovation business. He took his first ride in an ultralight in 1991. In 1992 after 9 hours of dual instruction on a Merlin, he was sufficiently hooked to start building his first airplane, a Minimax. In the summer and fall of 1996 he took more lessons at Blue Yonder Aviation on the EZ Flyer, obtaining his ultralight permit in January of 1997. He joined the CUFC in January 1997 as well. His first flight in the Minimax was in April 1997. In October 1998, he purchased a two seat Koala.



He has some interesting stories to tell about his flying experiences. Like many of us, he has experienced some Rotax moments. His original engine in his Minimax was a 28 horsepower Rotax 277. On a hot day at Indus the airplane had anemic performance if the engine was running well. One day the engine elected to be temperamental. Dale and the Minimax survived the forced landing but the engine was immediately relegated to ground duties and is now gathering dust in his garage. On another occasion, an ignition wire came loose and once again he executed a forced landing in a field. Undeterred by these minor setbacks, Dale enjoys the occasional flight in his Koala while dreaming of his first flight in the Starlet.➔

CUFC Annual New Year Dinner

Saturday, February 22nd
Cocktails: 6:00
Dinner: 7:00

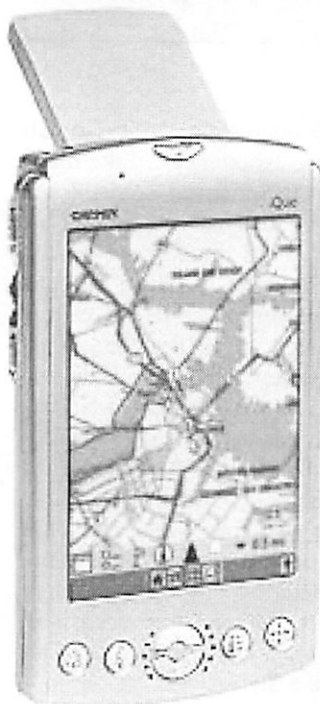
McKenzie Meadows Golf Club
17215 McKenzie Meadows Dr SE

Tickets: \$25.00 each from Dave
Procysheh, 257-8064

More GPS Alternatives

by Ed D'Antoni

Gamin, in conjunction with Palm is marketing the iQ3600. It is a standard palm pilot with a built in GPS module with an aviation database. An automotive database is also available. The US suggested list is \$589 but in reality it will probably sell for about \$400 US and about \$600 in Canada.



It comes with a Flip-up integrated GPS patch antenna, speaker for voice-guidance commands, MP3 player, message playback, voice recorder for making memos, quick notes, and messages on the fly.

It includes a rechargeable internal Lithium-ion battery (charges in cradle or while connected to adapter), built-in 32MB of memory for downloading map data and other Palm OS-compatible software. The unit size is 2.8" x 5" x .8" (72 x 128 x 20.3 mm), with a 2.16" x 3.24" (54 x 81 mm), 320 x 480 pixel, high-resolution, color display.

Included accessories are a metal stylus, SUB recharging HotSync cradle, A/C power/charging adapter, Quick start guide, Installation & Application CD-ROM with manual, choice of MapSourceT configuration with full unlock certificate, Americas, Europe, etc. →

The Alberta Air Adventure Tour 2003

by Stu Simpson

Planning for the Alberta Air Adventure Tour 2003 is well underway. Our destination this year is northern Saskatchewan. Here's the itinerary:

Day 1

Monday, August 18th:
 Kirkby Field - Drumheller: 55 miles
 Drumheller - Hanna: 40 miles
 Hanna - Oyen: 65 miles
 Oyen - Kindersley: 60 miles

Day 2

Tuesday, August 19th:
 Kindersley - Rosetown: 55 miles
 Rosetown - Outlook: 35 miles
 Outlook - Saskatoon: 50 miles

Day 3

Wednesday, August 20th
 Saskatoon - N. Battleford: 80 miles
 N. Battleford - Glaslyn: 45 miles
 Glaslyn - Meadow Lake: 65 miles
 Meadow Lake - Cold Lake: 78 miles

Day 4

Thursday, August 21st
 Cold Lake - St. Paul: 55 miles
 St. Paul - Vegreville: 45 miles
 Vegreville - Wetaskiwin: 65 miles

Day 5

Friday, August 22nd
 Wetaskiwin - Red Deer: 60 miles
 Red Deer - Bishell's: 45 miles
 Bishell's - Kirkby Field: 40 miles

As with last year's trip there are strips listed here at which we may not land, and vice versa. We're also going to try and line up some interesting activities at our stops along the way. We'll keep you informed of the details as time goes on.

The biggest

change we'll see this year is the implementation of a public relations strategy. We realized with last year's experience that adventures like this garner a tremendous amount of attention. As such, the trip is a wonderful opportunity to promote recreational aviation, especially in light of the 100th anniversary of powered flight. Mac Harrison is currently working hard on this PR strategy.

At this point in the planning it appears we may have 20 aircraft along, maybe more. This will become very challenging with ground operating procedures. We learned from last year's adventure (with only 15 aircraft) that a large number of planes on a small airport ramp can be a problem, so we're also developing an aircraft marshalling plan to maximize safety on the ground.

For safety purposes in flight we'll limit our groups of aircraft to a maximum of five with a designated flight leader. This worked really well last year. It's important to note that any participating aircraft will be expected to depart with a fully functional two-way radio.

Ground Crew

Ground crew is the glue that holds these trips together. Ground vehicles carry equipment, shuttle people to and from the airports to overnight stops and provide crucial assistance in practically every other aspect of the trip. As a way to say thanks to our ground support people, wherever possible, safe and legal, participating pilots will be providing flights to ground crew
 (Continued on page 8)



Light Engine Services Ltd.

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For Rotech Research Canada Ltd.

Call: 780-418-4164
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 lighteng@telusplanet.net

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- Rotax Engine Sales - Service - Parts
- Engine Test Stand Service
- Engine/Flight Instruments - Radios
- Propellers - Spinners - Accessories

RR1, Site 6, Box 11, St. Albert, AB T8N 1M8

Tour 2003 - continued from page 7

members during the trip. If anyone has an interest in participating as ground crew, contact Stu Simpson.

Equipment Notes

We've compiled a list of equipment that helps to make the flight safer and more enjoyable. The list includes items such as Bishell's auxiliary fuel tank that can fit in the back of a pick-up truck (aircraft can refuel from this tank at each stop), radios and antennae for ground crew, CB radios and antennae, personal communication radios, and cell phones.

In addition, past experience with Air Adventure Tours indicates a number of other items for pilots to bring to make the trip safe and enjoyable. These items include:

Aircraft tie-downs (contact Glen Bishell for some very light, strong ones)

Control Locks (contact Carl Forman for info on building them very cheaply)

Fuel jugs and oil (pilots will be mixing their own)

Up-to-date maps (Calgary, Regina and Edmonton sectionals)

Canada Flight Supplement

Up-to-date aircraft documents, eg. registration, insurance, licences

GPS and extra batteries

Tool kit with hose clamps, 100 mph tape,

lock wire, cotter pins, etc.

Extra tires or tubes, tire pump, cooling fluid.

Bug repellent, windshield and prop cleaner, paper towel

Money and/or credit card

First aid kit and/or survival kit, water and food, survival blanket

Proper clothing, including adequate footwear, gloves

Knife and/or multi-tool, survival book, compass, pup tent

Matches (to be used with caution by pilots of wooden aircraft :))

Camera and film, notebook and pen

Radio, intercom and batteries

Flashlight and batteries.

Naturally, not all these items can be carried in the airplane. However, having easy access to them, even from the ground vehicles, will make it much easier to effect field repairs, deal with minor emergencies, and generally make the trip much more enjoyable.

Things To Do Between Now and Departure

There is plenty to do between now and August 18th. We need to finalize the participants list and ensure all aircraft, ground vehicles and equipment are up to snuff. For pilots planning to fly the

Tour it might be a good time to start preparing your aircraft. Ensure the airframe and engine will be in good shape for the trip. Equally important, make sure your radio and intercom gear is working properly. Club member Gerry MacDonald can provide a wealth of guidance with

these items. There will be a few more meetings to finalize details, but we'll provide plenty of notice for those.

Anyone who is interested in participating as either aircrew or ground crew, please get in touch with Stu Simpson at bushmstr@telus.net

I strongly encourage as many people as possible to get involved. The challenges, achievements and camaraderie of these trips make them absolutely unforgettable adventures and create memories that will last a lifetime! →



Meet the Murphy Moose

The Calgary Chapter of the RAA has arranged for Murphy Aircraft to come to Springbank to discuss their kits and demonstrated the Moose.

Saturday, February 22nd

Calgary Flying Club, Springbank

Demo rides in the Moose at 2:00pm

Meeting, with aircraft videos at 4:30pm

Members of the CUFC are invited to attend. For more information contact Glen Clark: 279-1036.

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