

OFFICIAL NEWSLETTER OF RAAC CHAPTER 85

September 2000







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#### On The Cover:

Fred Baron's Murphy Renegade. Fred Baron Photo. Above: the Balloons of Arlington. Mark Munzel Photo

The TURN AND BANK is the monthly publication of RAAC Chapter 85 and is intended to keep members informed as to the club's activities, and to promote safety and technical excellence in the field of sport aviation. No responsibility or liability is assumed, expressed or implied as to the content of articles contained in the Turn and Bank: the intention is to provide a forum for discussion and exchange of ideas

Newsletter contributions should be mailed to George Gregory, 19470-88th Avenue, Surrey, B.C. V4N 3G5 no later than the 12th of each month. Business Fax is (604)-469-3495. Please remember to indicate "attention George Gregory" on your fax.

Enquiries to the Membership Chairman should be mailed to Rob Prior, #204-130 E.11th St., North Vancouver, B.C. V7L-4R3

#### For inspections of Amateur Built Aircraft Projects contact the MDRA Inspection Services , ph. 1-877-419-2111 fax 1-519-457-0980 email: mdrainsp@on.aibn.com

Regular Meetings are held on the first Tues. of each month at 20:00 in the clubhouse:

Delta Airpark, 4103-104th Street Delta, B.C. Clubhouse phone: 596-3644

Mailing Address: Chapter 85, RAAC

c/o Delta Heritage Airpark, 4103-104th St., RR#3, Delta, B.C. V4K-3N3 Executive meetings are on the third Tues. of each month at 19:30 in the clubhouse.

Chapter aircraft pilots, mail cheques (Payable to RAAC Chapter 85) to: Brad Short, 8052-122a Street.Surrey. B.C. V3W-7R4

RAAC National Homepage: http://www.inforamp.net/~raac
RAA Chapter 85 Homepage: http://home.istar.ca/~airframe/raa\_85
Delta Heritage Air Park Homepage: http://home.istar.ca/~bb4
Source for CARS and Chapter 549 Airworthiness Manual:
http://www.aerotraining.com

RECREATIONAL AIRCRAFT ASSOCIATION CANADA Delta Heritage Airpark Vancouver, B.C.



President: Past President:	Tim Nicholas	==0 40:=
Past President:	Titti Titerioids	572-1845
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Computers in Aviation General	Paul Trudel	980-//23 532-8570
General	raui itudei	332-03/0

#### Technical Guy

Tips from the Western Canada RVator

#### RV Landing Techniques Brian Lloyd, Cameron Park, CA Part II

If you want to come in with less energy than you need for a power off approach you can use the engine to add energy at a rate that offsets the extra loss. This may be

done at any point. One approach would be to reduce airspeed (low energy to start with) and add power continuously to offset the increased energy loss. This is the "drag it in hanging on the prop" approach. You can also add in just enough energy at just the right moment to allow the airplane to round-out before it stalls. This is the "shot of power so I don't slam into the

runway"approach. (if done right this one is really cool!)

Then there is my favorite, the "hang it on the prop oh sh-- I am too slow give it a big shot of power oops I just ballooned now I need another shot of power to prevent the crash oh damn now

I am floating three quarters of the way down the runway will I get it stopped in time oh hell I had just better go around again" approach. Remember, energy management is your friend.

This message is an example of YAFITHGTSE (yet another new flight instructor teaching his grandmother to suck eggs.) **T&B** 

#### **Rob Prior**

home.istar.ca/~airframe

3032 Carina Place Burnaby BC V3J 1B5

604/422.8556

## Homebuilt Aircraft Border Crossing Permits

...The permanent, perpetual, don't-have-toapply-for-it **Border Crossing Permit For Homebuilts!** 

By the long and splendid efforts of EAA, EAA Canadian Council, MOT and FAA, we now have a standing Border Crossing Permit to carry on board. Many Thanks to Rem Walker, EAA Canadian Council for sending it along.

Note! Copy of the permit along with requisite "letter of Permission" will be included in the journey logs for the Turbi and the J-5.

#### The following conditions must be met:

- 1) The aircraft has been issued a Canadian Special Certificate of Airworthiness with Block 7, "classification" listed as amateurbuilt.
- 2) The currently effective Canadian special certificate of airworthiness and this authorization shall be carried on board the aircraft
- 3) A copy of this authorization shall be displayed in the aircraft when operating under the terms of this SFA.
- 4) The identification markings assigned to

the aircraft by the country of registry must be displayed on the aircraft according to that country's applicable requirements.

- 5. The aircraft shall be operated only by airmen holding appropriate certificates or licenses issued or validated by the United States or by the country of registry.
- 6. No person may be carried in this aircraft during flight unless that person has been advised of the content of this authorization and of the airworthiness status of the aircraft.
- 7. Persons or property shall not be carried for compensation or hire on board the aircraft.
- 8. The aircraft shall be operated under visual flight rules (VFR) day only, unless the operating limitations issued for the aircraft authorize night or instrument flight (IFR) operations, in which case the aircraft shall be equipped in accordance with 14 CFR part 91.205 and the pilot in command shall comply with 14 CFR part 91.711.
- 9. The aircraft shall be operated according to restrictions imposed by Transport Canada Aviation provided those restrictions do not limit or change the conditions herein imposed.
- 10. Except when they have been waived by the administrator for the purpose of an air show, the aircraft shall be operated according to the general operating and flight rules of 14 CFR part 91, and in particular section 91.711.

- 11. The operator of the aircraft shall advise Air Traffic Control of the nature of the flight when establishing communications.
- 12. Except when otherwise directed by Air Traffic Control, or in the event of an emergency, all flights shall be conducted to avoid areas having heavy air traffic and to avoid cities, towns, villages, and congested areas, or any other area where the flights might create hazardous exposure to persons or property.
- 13. For participation in and air show, the FAA may impose any additional conditions or limitations deemed necessary to ensure the protection of persons or property. An operator who wished to participate in an air show must contact the geographically responsible Flight Standards District Office (FSDO) for issuance of a waiver to participate in waivered airspace.
- 14. An aircraft operator, who is not the registered owner of the aircraft, must carry a signed letter of authorization from the registered owner showing the owner's permission for continued operation of the aircraft in U.S. airspace.
- 15. This Special Flight Authorization is valid for an indefinite period unless superseded or canceled in writing by the Administrator.

L Nicholas Lacey Director, Flight Standards Service, FAA Issued in Washington, D.C. on July 31, 1999

#### **BULLETIN BOARD**

If you have questions or problems with your aircraft construction, we have members who have developed some expertise in various fields who have volunteered to advise you on methods, procedures and pitfalls in the capacity of **Builders' Counselors** something along the lines of the former designee programme. Please respect the fact that these are volunteers who may not appreciate late calls, and will not return long-distance calls on their answering machines. Also, none are inspectors, and although experienced in their various fields, cannot

be held responsible. It is and remains **YOUR** project. Their names and numbers are on page two and will be a regular feature of our contents page.

Please note that the locks for the clubhouse and the club hangar have been changed. If you want a key that works in both hangar and clubhouse, give Rob Prior a call at 980-7723.

The Chapter has received a thankyou letter dated June 15 from BCIT's Laurie Clarke (it's been in my possession for a few months - ed) thanking the chapter for its

\$500 gift for the Recreational Aircraft Association Chapter 85 Bursary for students in their AME program. Good stuff - we need to do what we can to promote the cause - this is another way to do it. Let's give ourselves a collective pat on the back.

Last I heard, Norm Helmer is looking for someone to help with his **Paradyne** project. The Paradyne is a cutting edge new concept in STOL aircraft that shows promise. If you're interested give him a call at 943-7887.



#### Minutes of the General Meeting, 1 August, 2000

**Call to order:** 8:00 pm by President Tim Nicholas

Walker/Spence: that the minutes of the General meeting of 4 July, 2000 be adopted as printed in the *Turn and Bank*. Discussion Carried.

#### **Committee Reports:**

**Treasury:** Verbal report by Treasurer Tim Novak. In good shape.

**Aircraft:** Tedd McHenry: Turbi pre-emptive mods completed. Re-assembly under way. New radio and better intercom to be installed.

We have just one offer on the J-5. Think

about this, folks; it's a good deal for somebody. Please note that our ad in the Turn and Bank should read "obo" and we are permitting offers from outside the chapter.

**RAAC:** Bruce Prior: Latest Exec. Minutes to Turn and Bank. Nominations still open for AGM.

**DHAPCOM:** Terry Wilshire: We have the new Five Year Licensing Agreement with GVRD Parks!! Good stuff and the result of a bunch of hard slogging by the Committee. Approval received to proceed with the new fuel system. Continue in the black with a healthy bank account. There are lots of tiedowns available. Although this is a relatively minor factor, the field LOOKS a bit empty which gives a wrong impression. Lots of volunteers still needed, Joe Shewella is fixing up our "new" tractor.

**Library:** Don Souter: OK. (Summer being a good time for illiteracy). Neither Don nor anybody else has heard a word about or from Abbotsford.

**Membership:** Rob Prior: OK. Lothar will be including a copy of the Chapter's brochure in the September issue, hopefully. We ask

you to give it to a good prospect; the chapter could use some more good men (and women).

**Buildings:** Dave Bell: OK. The neatening up of the garden around the clubhouse is by Emily.

**Newsletter:** George Gregory: Always receptive to new material.

Old Business: none. New Business:

Bruce Prior looking for volunteers to see how to re-institute the breakfasts. Needs non-bagged folk for this, the sequel.

Spence/Juraski: that we adjourn, and so we did.

Jim Hunter, noisome clerk.

# The Chapter's J-5 Project is FOR SALE \$8500 obo

no parting out.

Details:
Tedd McHenry

574-4764
Tim Nicholas 572-1845





A EVER STOP to think much about when ya was a kid, how those good old summer days would come along an' everyone would be anxious to

head for their favourite place to swim? There weren't many kids where I lived, but we had a beautiful bay with sand beaches, an' the bay was shaped like a horseshoe with a very narrow channel leading to the big lake. An' we were only two stone

## The Way It Was, Part V

Frank Sutton

throws from the CPR tracks. We could swim an' get involved in all kinds of activities on the beach, but when a train whistle blew we would run over to the small station an' watch the trains come in. Them were the days when the harvester trains used to run. They were called harvester trains because the migrant workers from the east would go out west for the summer, stay for the prairie harvest and return to the east in the fall. All passenger trains goin' west were odd numbered and passenger trains goin' east were even numbered and in the very busy season there were eight passenger trains a day; 1,3,5 & 7 headin' west and 2,4,6,& 8 going east, an' some of these trains was so long they had to break them up in sections. I've seen 3 and 4 sections for 1 train. Those passenger trains had big beautiful engines, the 2300 and the 2800 series had 3 big drivin' wheels on each side and they were over 6' high. sometimes the passenger trains didn't even stop, they'd barrel right through at maybe 50 mph, then we'd go back for another swim.

I used to go and visit Mr. Burns a lot. He was a forest ranger in summer and trapper in the winter, the forestry camp was built on the channel between our bay an' the lake. We could walk on sand all the way across the channel. But best of all that's where Jimmy Westaway used to land when he came to visit the

rangers. He flew an Ontario forestry plane, and he was the best pilot in the whole world. During his flying career he had 22 forced landings an' was never seriously hurt. He flew a beautiful yellow Tiger Moth on floats, it sure was beautiful to watch him land and take off. When he landed the aircraft would be so level the floats would kiss the water at the same time and the floats would lean ahead ever so gently until they settled in the water. He would then cut the engine and coast until he was alongside the ranger's dock. Most of the time he seemed to fly just above the tree tops. But one day he come over pretty high, just as he was overhead, he made two side slips and it seems he just dropped in on us. On another occasion we gave him a big rock about 6" in diameter and asked him to drop it form the plane. When he took off he made a circuits and came over at about 1000' then at the right moment he rolled the aircraft over on its side and let the rock go. I never saw such a big splash in all my life.

There's no doubt he was the greatest flyer that ever lived.

I'll be after seein' ya!

T&B

But best of all that's where Jimmy West-away used to land when he came to visit the rangers... he was the best pilot in the whole world.

## RAA HEADQUARTERS REPORT JULY 2000

Minutes of RAA Board Meeting at Headquarters July 20, 2000 Meeting was called to order at 1535 hours, President Ken Gamble Chairman, present Mahon, Quinton, Evans and Horsten.

Chris Horsten, appointed Director at Large for the balance of 2000 was welcomed to the Board.

June 21, 2000 meeting minutes were moved for acceptance as recorded. Moved by Gamble, seconded by Mahon, carried.

Promotional information supplies being delivered to Transport Canada booth at Oshkosh for distribution.

Quinton to enclose letter with these minutes asking for awards nominations a.s.a.p. for awards presentation at the AGM.

Moved by Mahon, seconded by Evans, Chris Horsten (Investors Group) is authorized to investigate best return and to proceed with \$75,000 investment, \$50,000 locked up for one year, \$25,000 retrievable on three days notice. Carried.

SPECIAL NOTICE TO REGIONAL DIRECTORS: Regional Directors are reminded that the extra complimentary magazine copies are

intended for distribution in airport lounges, flying club lobbies, community libraries, community centres, educational institution libraries, and places where potential national and chapter members may be contacted. These magazines are not intended for distribution to non-national members at chapter meetings. Please include in your report to the AGM innovative ways you are using these magazines as a promotional tool in your region.

Quinton to investigate Canadian Aviation News as a possible distribution method.

Geisler to proceed with purchase of 70 large size logos for distribution to chapters as promotional material.

Quinton to reply to various inquiries that magazine subscriptions are available to educational institutions at 50% of the membership price, and are being advised of local chapter contacts who may wish to participate.

Mahon tabled notice that a means must be found to keep the Builders' Manual reference numbers valid or deleted. Not solved. Meeting adjourned at 1940 hours.

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#### RAA HEADQUARTERS REPORT ADDITION IMPORTANT IMPORTANT

The AGM is fast approaching and with it our annual opportunity to recognize those deserving individuals in the Recreational Aviation Community.

There are four Howard Bexton Awards for contribution to recreational aviation by RAA members - Eastern Canada, Ontario, Western Canada and Pacific Canada.

There is one Ken Gamble Award for national contribution to recreational aviation in Canada open to anyone.

The Kathryn Gamble Award is for personal achievement.

Please forward your nominations for awards to HQ a.s.a.p. to allow the awards committee opportunity to have the awards ready for the AGM.

If you do not make any nominations from your chapter or region, there will be no awards made in your chapter or region.

Another Special Note to Regional Directors:

Please have your reports ready for presentation at the AGM (September 22 to 24, 2000) in Ste. Foy (Quebec City), PQ.

We are all interested in what your region has been doing to promote recreational aviation in your area. There is particular interest in projects you have tried in your areas and how successful you have been.

Bring some good experiences to share with your fellow members from across Canada! **T&B** 



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Classified Ads are free (within reason) to members. Display Ad rates are: Business Card:\$25 per year

1/4 page:	\$10/month	\$100/yr
1/2 page	\$15/month	\$150/yr
1 page:	\$25/month	\$250/yr

Ads that have been in for more than 6 months are subject to removal if space is required for other stuff. Please contact George the editor if you want it kept in.

**FOR SALE:** New 4130 Tubing - most sizes available. Used - Tripacer Fuselage (comes with logs), metal prop off 150 hp TRIPACER (comes with logs) Cessna spring steel gear legs, misc. wheels, axles, brakes and parts, misc. instruments (no altimeters!) A75 engine case, 7 Continental cylinders, some Lycoming cylinders (big), carbs, mags, pumps, old radios, etc. Call Pat at home, 533-1839.

**WANTED:** Medium size air compressor, with or without tank.

Doug 275-1405

#### **FOR SALE:**

52" x 34" Shettler's propeller with hub, \$100.

Vic Gabas (604) 853-2778

FOR SALE: SIROCCO PROIECT

Fuselage, canopy, tail group complete. Air frame control components done except for cable. Main-wheel gear, wheels and brakes done. Tail-spring and wheel included. Panel made, no instruments. Lycoming 0-290 GPU Zero-timed. Will Neubert stainless cross-over exhaust with stainless muffler/shrouds. Bendix PSC5 carb. Bendix mags with non-shielded leads. no starter, starter ring or alternator. Weldtech engine mount. McCauley prop.

Wings: ribs and minor spars done. Spar diaphragms done. Two spar-grade spruce planks. No other wing parts.

\$15,000 firm, complete and not interested in parting-out

Jim Hunter 576-2678

#### **FOR SALE:**

1 set (8) 60810 (68763) M10 main bearings \$295 per set

1/2 set (4) of same \$150 per set 1 set (8) 60810 (68763) M003 main bearings \$295 per set

1 set (8) 61662 M10 Rod Bearings \$175 per set

All bearings fit Lycoming 0-235 and 0-290 (without C/S prop). All are new, perfect but certs mislaid,

Gogi (604) 823-6428

#### **FOR SALE:**

1957 Tripacer Wings uncovered, all reworked. New leading edge. New ash tip.

All Zinc Chromate ready to fabric. Included: 2-18 gal. gas tank, 2 - gas tank cover, landing light, aileron and flap, front and rear struts. Asking \$4000 Canadian.

Roger Gauthier (Kelowna) (250)-763-1529 (250) 212-0832 (cel)

**WANTED:** PA 18 or PA 20/22 Wings. Some damage OK. 946-5881

FOR SALE: Electronic Tach 2.25" with generator (new) \$125, 6" castoring tailwheel, \$50, Electronic dimmer control, \$25, 2 New 600.6 Goodyear Tires, \$125 for pair, Combo EGT/CHT (needs probes),\$50, Tach Cont.C85-0200, \$35, Temp (OAT) guage, new, \$35, Windscreen Ant., Van's, new,\$15, 525 battery (new) never had electrolyte, \$75, Fuel Pressure Guage O/H, \$35, Lycoming Starter 0-290, 0235, 0320, 0360, for \$375.

Bob Cutting 275-1603

FOR SALE: Fleet F7 Biplane replica. Very close to original copy except for uncowled engine. Engine: Kinner R55 160 hp. Aircraft is modified for solo operation from rear cockpit. Extra bellytank with wobble pump. Original Fleet wheels, brakes, pedals and stick column. Original parachute accommodating bucket seats, oversize tires, Stits covering, voice activated intercom. Ted Hendrickson Propeller, manual and extra key magswitch. \$35,000 Canadian. (604) 478-6048

Classified continued on page 8

Will consider small antique aircraft engine as trade-in.

**FOR SALE:** Some Cont.0-200 parts: Case (checked, no cracks) Camshaft, Gears, Rods and Pistons; Carb and spider, Starter (pull type) and Generator, mags (one is dis-assembled). \$2500 for the package, offers considered on individual parts. Also, Prop hub for Cont. tapered shaft, \$350, Wing parts for Taylorcraft BC-12D (disassembled) including ribs, spars, compression struts, brace wires and strut fittings. Offers?

Contact David Smith (604) 513-0353

(604)513-0373 (fax)

#### **Aircraft Painting**

Will paint, finish off aircraft for cash or part share in airplane. Prefer Cessna or Piper. Value of work is \$6-8000 depending on condition of aircraft.

Kevin 580-6264

**FOR SALE:** One set of 1500 Murphy floats ready to go.

Ole #45-3931 198 st. Langley BC 514-1280

**FOR SALE**: 6 Factory new Franklin 180 hp cylinders includes installed valves \$300 each, will not part out.

Tim Novak 271-8586

**FOR SALE:** Softcom 2 place Intercom ATC-2Y, with accessories \$110.

Stuart Gear (604) 941-9402

E-mail:sgear@infoserve.net

#### **FOR SALE:**

ELT: ACK E-01, meets TSO c91 - A, complete with external antenna kit and remote panel \$225.

David Clark Headsets \$225 (mostly 10-30 type, helicopter and airplane.

Telex PT-300 PTT \$30.

Full map GPS Garmin 195 - Nicad pack, Pacific NW map chip, PC/MAC computer cable kit, mounting bracket. \$1500 or \$1200 without map data chip.

Bendix RSA 10 ED1 Injector Body, no history, \$400. Woodward Prop Governor #210681, no history, \$400.

National 360 Parachute, blue with matching

carry bag \$900

Christen 5 point aerobatic seat belt harness, with 2-point Military 3" belt \$350

Guido 948-3464 e-mail: glepore@direct.ca **FOR SALE:** 4130 Annealed Gauge Plate now in stock, .025 to .375. We will sell you the plate or laser cut the parts

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(604) 946-4152, Fax: (604) 946-4153

E-mail: tmw@industriallaser.com

**FOR SALE:** 1- Miller 200 amp AC/DC H.F. Tig/stick welding machine - 220V 1 ph. \$1200. 1- Miller 120 amp MIG (wire) welding machine, 110 volt. Portable sheet metal type, c/w gas kit (almost new) - \$800.

Pat O'Donnell 533-1839

**FOR SALE:** Zenith 250 plans and parts, wing rib moulds \$360. Christavia Mk IV project, 4130 steel tube, wing ribs, flaps ailerons, gear legs, wheels and brakes, tail stab and rudder, \$3600.

Paul Trudel 532-8570

HY IS IT that so much stuff that's fun (read flying) is so darned expensive? I mean, an airplane is certainly not as complex as a car, yet can easily cost four times as much. At the very least. Case in point: my van cost about \$25,000 new. It carries

seven people in airconditioned comfort. Capacitywise, the closest we get is maybe a Cessna 206. I would guess that to come in somewhere in the vicinity of 300,000 Canadian dollars. Yikes!

Larry Thompson slipped in a sales quote from March of 1973 from Mid-America STOL Aircraft to a fellow in Seattle. A new Lycoming 0-320-E2A sold for \$2,850 US dollars (believe it or not, I believe our dollar was worth more than theirs in those days as well). With a Doyne Engine Conversion Kit (whatever that is) and installation in their plant the total came in a shade under \$5000, and then they knocked off \$800 for the old engine.

I think I was born about 15 years too late. What happened?

Demographics certainly played a part. We have a whole bunch of pilots not active anymore, and fewer people training. The Liability laws (thankfully reformed now, though perhaps too late) in the States did their part to drive the cost into the stratosphere.

Less airplanes and engines were built,



and the cost went up.

The AGATE program in the U.S. is starting to produce results. Two new exciting engines are nearly ready to make their debut. Continental's offering is called the TCM Monoblock engine. It is hoped to be half as expensive as a conventional reciprocating engine and uses compression to ignite the fuel much like a diesel engine. It therefore requires no ignition system in the conventional sense of the word. There is no separate crankcase or head casting, and passages for oil, air, and coolant are cast into the block. It is liquid cooled. All in all, about half the parts of a conventional engine (read: cheaper. At least that's the idea.) It produces 200 hp with four cylinders displacing 241 cubic inches. Maybe it will be available by the time my Cessna needs a new engine...

Williams International will be introducing the FJX-2 turbine engine. It is supposed to raise the technology bar in its field, as well as cost about one-tenth of a conventional jet engine (hmmm. Would it fit on a Tailwind?) At least those are the

goals Williams has set. Time will tell.

Exciting developments. It's a shame they didn't come sooner. But at least the problem has been noted in high circles and some steps have been taken. Now the liability problem has been

addressed to some extent, and the technology is on the move again. What's next?

Economies of scale must be utilized. This means making more airplanes. It also means making more pilots to fly those airplanes. That's why programs like the Young Eagles is so important. Anything to make flying attractive, accessible, desirable, practical.

What can we do?

Take some time to introduce a non-flying friend, especially young people, to flying. No matter what they say about how different kids are today, flying will always be cool, be "extreme". I have a young friend, now seventeen, who has, over the years become a regular flying buddy. We argue good naturedly about just about everything, but one thing that never gets missed when he and his family are in town is the obligatory airplane ride. It's great for us both. And maybe one of every ten that gets a ride may become a consumer-pilot who needs some of the technology being developed today. It will need a market if it is to catch hold... T&B