



NEWSLETTER

Carb Heat

Hot Air and Flying Rumours

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NOVEMBER-DECEMBER 1995

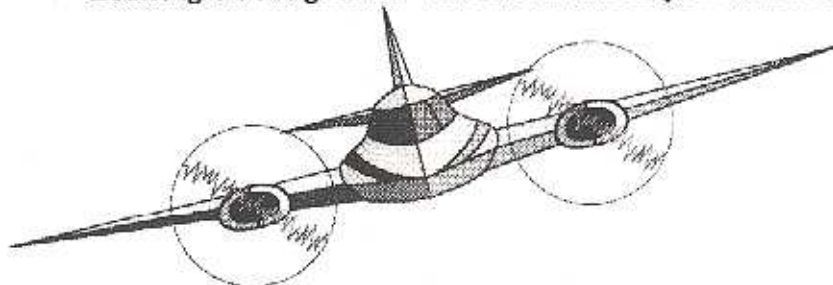
Next Meeting: Thursday 16th November 2000hrs
Bush Theatre
National Aviation Museum
Rockcliffe

Program: -General business
Guest Speaker: -Bill Pepler, General manager of COPA on
- The Future of Recreational Aviation in Canada

Inside: *Climbing to New Heights* by Terry-Lynn Findlay of the magazine Fifty-Five Plus. An article featuring chapter member John Richards and his Zenith CH-300

Assumed Departures - A reprint of an article in the Airspace Newsletter and chapter member Garry Fancy's response

Leaning on the ground - John Schwaner (jschwaner@avweb.com)



Editor's note - I've discovered the graphic capabilities of the computer .

President:	Gary Palmer	596-2172	Aircraft Ops:	Dick Moore	836-5554
Vice Pres:	R. Emmerson	682-2058	Membership:	Barney DeSchneider	226-6003
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Treasurer:	George Elliott	692-9327	Classifieds:	Andy Douma	691-7622
Editor:	Andy Douma	691-7622	Publishing:	Dick Moore	836-5554

President's Corner

As I write this column, the first snow flurries have made their entrance on the weather stage, and some members have already readied their aircraft for the usual winter hibernation. Irving Stone, had the Pietenpol up for the last flight of the season on Oct. 28th, and Ken MacKenzie has his C-150 tucked away in one of the hangers, and will be on his way south to warmer winter climes as you read this.

Ken has promised to write an article on his aviation related wanderings as a snowbird, just to make us all jealous.

October Highlights:

Elections were the first order of business with the incumbents agreeing to serve on your behalf for another two years. I would like to thank George Elliott, Andy Douma, and Dick Moore for their continued selfless service to the club. In addition, we were fortunate to have Luc DeSadeleer step forward to fill Rod Emmerson's big shoes as Vice President. I know that each member of the executive looks forward to the challenges of the future. Rod will be missed as he moves on to his latest project, retirement; however I understand that the Bancroft airport is quite accessible, even if a little challenging to the average Lancair pilot. We all hope that Rod keeps in touch, and finds time to get his Teenie Two back in the air.

Bill Argue's Pegasair project was the star of our October meeting at the Carp chapter hanger. Bill has the fuselage complete and on the wheels. There were an endless stream of potential builders trying the Pegasair on for size, as Bill had the seats roughed in.

Bill filled us in on many of the unique aspects of the Pegasair, and its unique automatic leading edge slats that provide extraordinary slow flight capability. Apparently, at a recent fly-in, the factory demonstrator took off into a stiff wind, climbed to a thousand feet, and then slowly descended to touch down at its initial takeoff point.

Bill also demonstrated the use of a metal shrinker that he used for forming some curved aluminum angles for the instrument panel. It was amazing how easily, and quickly he was able to form a part that I would have probably made of fibreglass, and spent much longer at. Once again, the right tools make your job much easier.

At the rate Bill is going, I would not be surprised to see his Bird in the air in 1997.

Bob Hoover Wins at last!

While checking out the news in "rec.aviation.homebuilt" on the Internet last week, I was pleasantly surprised to see a brief flurry of postings to the effect that Bob Hoover has had his medical re-instated by the FAA. That means that we will once again be treated to his aerial excellence at Sun n Fun, and Oshkosh. Unfortunately, we are unlikely to see justice, as the two cowards that started this whole charade seem to have successfully slithered back under the rock from which they came. I don't know if these two creatures are part of the federal witness protection program, but perhaps they need to be once the lynching party forms, even if only vicariously, in cyberspace.

Flight Plan Fiasco!

At our last meeting, Garry Fancy notified us of some

proposed changes in the handling of flight plans that calls for some vigorous grass roots opposition.

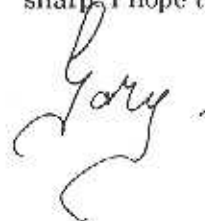
The changes, as proposed would **automatically open all flight plans at the proposed time of departure**. It would now be **invalid to open the plan via radio** on 126.7 Mhz. This ill considered change will not only increase workload at FSS stations, it will also reduce even further the use of flight plans, further eroding safety, and needless to say result in many unnecessary SAR searches starting for flights never commenced. Some of you may remember that I was personally caught on the earlier baby brother to this change when I canceled a flight from Embrun a year ago after filing a flight plan and advising I would open via FSS on 126.7.

This is clearly a case of a bureaucracy out of touch with reality. So please take the time to let the minister know your thoughts on this matter, we still live in a democracy, and voter input matters!

Nov. 16th Mtg at NAM:

Bill Pepler, general manager of COPA will be our featured speaker at our next meeting. Bill has been asked to share his and COPA's views on the future of recreational aviation in Canada, and how COPA will represent our interests.

Our next meeting is being held at our normal **National Aviation Museum** location in the Bush Theatre at 8:00 PM sharp. I hope to see you there.



Climbing To New Heights

by Terry-Lynn Findley

Source: *Fifty Five Plus*,
October/November p. 4-6.

IN THE AUTUMN OF 1992, ON A clear, crisp day, John Richards piloted his home-built Zenith 300 aircraft on its inaugural flight with his granddaughter as passenger. Since then, Richards says, "Everyone's been up but my wife."

When asked what it was that sparked his fascination with flight, Richards reflects, "I've always been interested. I was one of those kids hanging off the fence at the Ottawa Flying Club, dreaming of flying. My real involvement began in 1939 when I worked there as an apprentice mechanic. It was then that I went for my first flight (as a passenger) in a biplane for a dollar."

During World War II, flight schools were asked by the military to teach recruits how to fly. Richards worked during that time as an aircraft mechanic. After the war, he began a 37 year career as an engineer with the National Research Council (NRC) testing aircraft engines. "I wasn't involved with air frames then," Richards says, "just engines."

At the time, regulations did

not permit Richards to earn a pilot's licence because his eyesight was not 20/20. He had to content himself with building and flying radio-controlled model airplanes. Each new model airplane that he built was a little bigger, and a little more complex.

One day, while leafing through an aircraft magazine he read about the challenge of building a full-size plane, and decided to purchase plans and materials from Zenair, an aircraft

experience with all of the tools in the machine shop.

He built his 1,150 pound Zenith 300 airplane mainly from raw materials, but he refurbished a used engine, and bought the cockpit canopy and two small wing tips. "The engine was an old, used Lycoming 0320, 150 horse power. It only cost \$6,000, but I had to completely rebuild it."

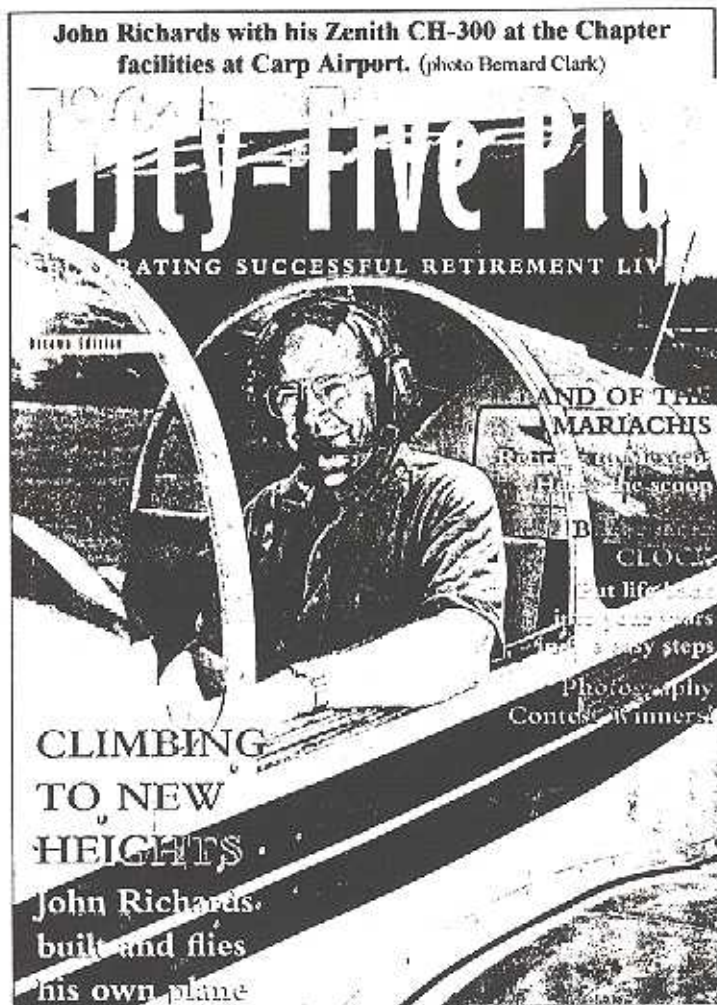
Richards confesses that he likes building even more than he does flying. This is a good thing, because he describes the materials he acquired to build his plane as "an awful big pile of small pieces."

The entire project took four years to complete and occupied much of Richards' spare time; he began construction while still at the NRC and finished once he retired. Most of the work was done in his basement and garage. Richards describes the task of painting the assembled plane in his back yard as an ordeal. "It was difficult to keep leaves and dust out of the paint, and the neighbours wondered what was going on."

Richards asserts, "Building your own plane is not an impossible dream, but it's got to be done right, and it takes a lot of time. Commercial air-craft have nothing on the home-built now. The sources of kits are limited, but the aircraft can be on a grand scale. You

don't have to build everything from scratch as I did, but a molded fibreglass kit can be in the \$40,000 price bracket."

His plane was checked out by pilot Stan Kurclik of the NRC. After a test flight there are often adjustments



company located in Midland.

Because of his work at the NRC, he was well prepared for the task of building a plane; he was a jack-of-all-trades there: carpenter, plumber, sheet metal worker; and had hands-on

that have to be made before a plane can be certified for flying; but upon landing, Kurclik gave the "thumbs up" signal to John and said that there were no misalignments at all. Richards' plane flew perfectly. He says, "I remember watching my plane taxiing down the runway a couple of times, but seeing that first liftoff was exhilarating."

Now that he had his own plane, Richard decided it was high time to learn how to fly—at age 72!

Thinking back to the days when he was excluded from learning to fly because of his eyesight, Richards laughs. "There are fewer restrictions now: pass a medical, be able to see and hear a bit, and put in your minimum duo and solo time." However, he does remember when a pilot could solo after three hours, while 20 hours is more common now because there are so many more air traffic regulations today.

Richards trained at Uplands and soloed at the Ottawa Flying Club. Although he knew how to fly, understood the mechanics of airplanes, and could navigate his way home, he wasn't "navigating strictly by the book" and so could not acquire his licence. Richards says, "I never had any trouble with flying, it was navigation that got me. I could always get back to the airport, but not by the book. You have to figure exactly where you are by the minute. When I sat down at my desk, it seemed easy to calculate distances and time; it was no effort at all. But when you're flying, your confidence can go down the drain."

He had almost given up hope of becoming a pilot until he talked to John Greer of Ottawa Aviation Services (OAS). Greer convinced him that he could master navigation if he stuck with one instructor for the duration of his training. OAS dispelled the misconception that he was too old to fly. Richards says,

"John Greer stuck by me. He's a very good instructor."

OAS is small aircraft oriented. Their philosophy is that anyone with the desire can learn to fly regardless of age. They maintain continuity by ensuring that trainees don't get transferred from instructor to instructor. John Richards feels his pilot licence is proof that their philosophy works.

John Sjolander, a partner at OAS, says, "John Richards was an unusual case, being the age that he was when he came to us. One of the popular misconceptions retired people have is that they're somehow too old to learn, either because they can't be medically certified, or they can't be taught the mechanical skills of aviation. That's just nonsense. The retirement age of an airline pilot is 60. My business partner Lary Loretto is a senior pilot with Air Canada, with over 30 years of service. He's due to retire in 1998, and there's nothing to say he won't be able to fly his own aircraft after that time."

As of August 1st of this year, the intermediate Recreational Pilot Permit was introduced as an alternative to the private licence. Although this permit is more limiting than the full private licence, it is a bridge between the full licence and the ultralight licence which is more restrictive still. The recreational permit allows flight during daylight hours in Canadian airspace, with only one passenger, while the ultralight licence allows for flying only ultralight aircraft, and no passengers. Sjolander says, "The new recreational permit bridges the gap between the ultralight licence, which has a tremendous number of restrictions, and the private licence." Working toward a recreational permit is easier. "They have shaved many of the training requirements and reduced the minimum flying time from 45 to 25 hours. And a large part of what

you do to get a recreational permit will count toward the 45 hour minimum for a private pilot licence."

Sjolander feels that the new recreational permit will revitalize the industry by giving people an option that is more easily attainable. "The private pilots we're turning out now are effectively the equivalent of the commercial pilots we turned out 15 years ago in terms of the length of time they fly and the skills they have. By putting so much emphasis on the academic side, we had lost sight of what flying is supposed to be. Not so much for professional pilots, but generally for most of us, flying is supposed to be fun. It still can be. This rec permit is one of the things that will allow us to put the fun back into flying.

"Whether you go for the full licence or the private permit, if I've done my job right, you probably won't get into serious trouble," Sjolander says. "And if you do, you should know how to either get yourself out of it, or survive it. The number of accidents in small airplanes is miniscule. And a large number of accidents can be legitimately classified as pilot error, and people being just plain stupid. If you fly by the rules, and don't test your limitations, you'll never get into trouble."

The full private pilot licence averages 65 hours of duo and solo flying time, with a minimum of 45 hours. This is an advanced course that qualifies pilots to go on to become commercial pilots if they wish. Based on the average time, this would cost approximately \$6,000. The recreational permit takes an average of 35 hours with a 25 hour minimum, which shaves the cost closer to \$3,500 - much more affordable for the average enthusiast who often doesn't want to fly at night or out of Canadian airspace anyway.

Richards confirms this

opinion. "I'm a Sunday pilot. I like to fly to Morrisburg, Smiths Falls, Iroquois. I go to all the fly-in breakfasts that flying clubs put on." He likes flying out of Carp. "The country you fly over when you follow the river is picturesque."

He recommends that people interested in aviation visit their local flying club. (See our directory below.) "Members of flying clubs have a variety of interests and knowledge, and are always willing to help," Richards says. As a rule, flying clubs encourage visitors. During the summer months, clubs hold impromptu meetings, which often start with a fly-in breakfast. "As many as 80 planes show up for the fly-in breakfasts at Carp."

Attaining his private pilot licence and building his airplane are enormous accomplishments, but Richards says he has one small regret: he hasn't made a perfect landing with Greer sitting in the cockpit beside him. "I'm always better landing on my own," he says, "but I'm going to get John up with me again." For further information on airplane kits, contact Zenair at (705) 526-2871.

THE FIFTY FIVE PLUS FLIGHT DIRECTORY

Whether you want to learn to fly, or simply to take in an aerial tour of the autumn leaves from the comfort of a passenger seat, the following directory will be of help. Kingston area residents and visitors who take tours will be able to enjoy spectacular views of Fort Henry, the Thousand Islands and sunken ships from the air.

OTTAWA

Air Ottawa

1-613-443-2759. Flight training in Cessna 150 and Cessna 172 aircraft; ground school; aircraft rental; aircraft parking; tours. Capital City Helicopters

1(613) 521-1630

Flight training in Enstrom helicopters; ground school; tours. Ottawa Aviation Services 1(613) 737 2933 Flight training in Katana and Beechcraft 19 Sport aircraft; ground school; aircraft rental; aircraft parking.

Ottawa Flying Club

1(613) 523 2142

Flight training in Cessna 150, Cessna 172, Piper Arrow and twin engine Beechcraft Duchess 76 aircraft; ground school; aircraft rental; tours.

Rockcliffe Flying Club

1(613) 746-4425

Flight training in Cessna 150 and Cessna 172 aircraft; ground school; aircraft rental; aircraft parking; tours.

ARNPRIOR

Chapman Aviation

1(613) 623 7231

Flight training in Cessna 150 and Cessna 172 aircraft; ground school; aircraft rental; aircraft parking; tours.

CARP

Westair Aviation

1(613)839-5431

Flight training; tours.

EMBRUN

Embrun Flying School

1(613) 443 5492

Flight training in Cessna 150 aircraft; ground school; aircraft rental.

MANOTICK

Rideau Valley Soaring School

1(613) 489-269

Flight training in Schweizer 233, Puchacz, Grob 103 and Pilatus gliders; ground school; glider rental; tours.

KINGSTON

Ontario Fun Flyers

1(613) 547 5255

Flight training; ground school; aircraft rental; aircraft parking;

charters & tours

(1-800-345-4181)



Airspace Newsletter

excerpt Issue 1/95

Assumed Departures

During VFR flight operations out of aerodromes that are uncontrolled and do not have an on-sight Flight Service Station (FSS), a flight plan or notification is opened based upon the indicated time of departure (ETD) **unless the FSS operator is notified of a revised ETD.** This process is necessary to ensure appropriate Search and Rescue notification should the flight become overdue at destination. Some pilots, however, have been making requests that the FSS not activate the flight plan/ notification until "I call airborne". These requests have placed an unacceptable responsibility upon the FSS operator and have led to confusion and uncertainty when the flight plan/notification is to be activated should the pilot fail to make the call. A recent directive to FSS Operators states, "It has been determined that prior to accepting any assumed departure flight plan/ notification, the pilot must be advised that, regardless of any other instructions given by the pilot, the flight plan/notification will be activated at the proposed time of departure and failure to contact the Operator may result in activating the Search and Rescue process at the overdue time." In other words, it will no longer be acceptable for a pilot to advise the FSS Operator, "DON'T ASSUME ME OFF, I'LL CALL AIRBORNE" with regards to activating a flight plan/ notification.

See A.I.P. Canada RAC 3.8.2 Note for details.

Garry Fancy's response was as follows:

October 11, 1995

The Editor
Airspace Newsletter
Place de Ville, 9th Floor
Transport Canada Aviation
AANDDC
Ottawa, KIA ON8

Dear Sir:

I am writing in response to an article entitled "Assumed Departures" in issue 1/95 of the Airspace Newsletter.

In the referenced article, with regard to opening flight plans, it is stated that "Some pilots, however, have been making requests (when phoning in a flight plan/notification) that the FSS not activate the flight plan/notification until 'I call airborne'. These requests have led to confusion and uncertainty when the flight plan/notification is to be activated should the pilot fail to make the call".

There are very good reasons why many pilots do not want their flight plan/notification activated until they are airborne, including delays caused by unexpected ground fog which FSS cannot predict, frost or ice on the wings, late passengers, aircraft unserviceability, fuel pumps not opened on schedule, actual enroute weather not as predicted, etc., etc. Your article goes on to state that a recent directive to FSS operators states that "It has been determined that prior to accepting any assumed departure flight plan/notifications, the pilot must be advised that regardless of any other instruction given by the pilot, the flight plan/notification will be activated at that proposed time of departure and failure to contact the operator may

result in activating the search and rescue process at the overdue time." I agree that where there is no method of contacting the FSS, as stated in the RAC 3.8.2 note, this process is the only viable option, but in many cases, the pilot can contact the FSS via VHF radio on the FSS frequency. Should TCA/ANS persist in implementing this directive (which was not properly communicated to the pilot community), it can be assumed that many more pilots will discontinue to file flight plans. Some preliminary enforcement of the "directive" has already caused some of my pilot friends to not file flight plans - it's just not worth the hassle. Flight plans are to provide a service and safety net for pilots. I believe the original intent of the flight plan is to provide for some flexibility in the flight plan departure. Why else provide two blocks for departure time; one for proposed and the other for actual? I also suggest that the manner in which this "change" was instituted leaves something to be desired; i.e. a directive to FSS operators with no official notification to the pilot community.

In closing, I would recommend that AIP RAC 3.8.2 be amended to clarify the currently accepted procedure as contained in the referenced note and to continue to allow flight plans to be opened on take-off. After all, that is exactly what ATC towers do - open the flight plan on take-off.

Let's try and make flight plans do what they were intended to do: provide a convenient and reliable safety net for the pilot; not a workload or burden for the FSS. After all, the advertisements in the aviation newspapers say that the FSS are there to help. Please let them.

Garry Fancy

cc: COPA

TCA/System Safety
(AABA)

If you have strong thoughts about this latest regulation being foisted on us without proper or adequate notification, write to the parties above. Ed.

The following article was posted on the Internet.

Leaning on the Ground

John Schwaner
(jschwaner@avweb.com)

Most engines have their idle mixture adjusted too rich, and most pilots don't understand the importance of proper leaning on the ground. A correctly leaned idle mixture will give you a longer-lasting engine, cleaner spark plugs, less crankcase sludge, and less wasted fuel.

Proper leaning during idle and taxi operations is much more important than most pilots understand. It can solve spark plug fouling problems, reduce valve guide wear and valve sticking problems, and prolong engine life. Here's why.

Mixture distribution is poor at idle. At a rich idle mixture, some fuel doesn't vaporize and enters the cylinder as a liquid where it partially burns and forms carbon deposits. In addition, a rich idle mixture causes lead fouling. Since gasoline, tetraethyl lead (the octane enhancer in avgas), and ethylene dibromide (the lead scavenging agent in avgas) all have different boiling points, fractionalization occurs in the

induction pipes. Some cylinders get a high dose of lead with no lead scavenger while other cylinders get the scavenger but with little lead.

The less of this stuff (carbon and lead) entering your engine at idle the better. At higher power settings and temperatures, fuel distribution improves, lead vaporizes and goes out the exhaust, and the spark plugs are hot enough to burn off the deposits that form at idle.

The idle mixture setting is a simple screwdriver adjustment on your engine's carburetor or fuel injection system. The optimum idle setting is one that is rich enough to provide a satisfactory acceleration under all conditions and lean enough to prevent spark plug fouling or rough operation.

You can easily check your idle mixture to see if it is adjusted properly. With the engine warm and running at a fast idle (1200 RPM), pull the mixture control knob out slowly while carefully observing the tachometer. You should observe a small increase in RPM as you lean. If you lean further, the RPM will drop again, the engine will run rough, and eventually it will quit.

An RPM rise of 25-50 indicates that your idle mixture is adjusted properly. If the RPM rise is greater than 50 RPM, your idle mixture is adjusted too rich. If you get no RPM rise at all, your idle mixture is too lean. In our experience, most engines are adjusted too rich.

Don't worry about getting the idle mixture too lean. If the idle mixture is too lean, the engine won't accelerate. Just richen the

mixture until the engine properly accelerates. You needn't worry about screwing up the takeoff or cruise mixture; adjusting the idle mixture doesn't affect the takeoff or cruise mixture ratio.

If you fly from a high altitude airport, you might want the idle mixture richer to compensate for flying to airports at lower elevations. Temperature changes may require the idle mixture set slightly rich, colder temperatures require a richer mixture.

At idle or near idle rpm, you can't harm the engine by leaning on the ground; over-lean the engine and it just quits. The mixture control knob can be pulled out until the engine starts to quit and then moved slightly in. Return the mixture control to full rich before starting your takeoff checklist. Follow the Pilot's Operating Handbook for proper mixture settings at takeoff.

Now the bad news: you can do serious damage to the engine by taking-off with the mixture manually leaned. Possible engine damage includes pre-ignition, detonation, and high engine temperature. You cannot, however, damage the engine by adjusting the idle mixture setting too lean.

Rather than manually leaning your engine for ground operations, it's better to have your mechanic adjust the idle mixture to a properly lean setting. If you lean manually on the ground, you need to understand the risks. If you lean close to idle cutoff, the engine won't accelerate when you advance the throttle for takeoff; no takeoff and no engine damage occurs. If you lean just a little,

then the mixture isn't lean enough to do any damage if you forget to push the mixture back in at takeoff. However, if you lean in a middle-of-the-road sort of way and forget to push the mixture in during takeoff, then you may damage the engine. For this reason, I'm hesitant to recommend leaning the engine at idle, unless specified in the POH.

Copyright 1995 by Sacramento Sky Ranch Inc. All rights reserved
 John Schwaner is AVweb's powerplant expert. John is a world-class authority on piston aircraft engines, and a specialist in the engineering analysis of engine failures. John runs Sacramento Sky Ranch, Inc., a leading distributor of aircraft and engine parts, and probably the foremost aircraft hose shop and magneto overhaul facility in the U.S. John and his wife live in Sacramento, California.

John has also written two superb technical books: Sky Ranch Engineering Manual and The Magneto Ignition System. Both can be previewed in and ordered from the AVweb Online Bookstore.

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 Publisher: Carl Marbach publisher@avweb.com This page was last updated Monday, October 09 1995.



New "Personalized" Membership Renewal Forms

An Excellent response!
Attached to last month's newsletter was your new "Personalized" Membership renewal form brought to you courtesy of Gary Palmer and the wonderful age of "easy to use" personal computers. This is intended to ease the annual membership renewal process, (less writing on everybody's part). All you need to do is check that the information is correct and either bring it, with your cheque, to the next meeting or mail it to our Chapter Post Box.
Many of you have already returned your renewal forms but there are many still out there. Please try to get them in to us as soon as able. Thanks
Ed

**PLEASE NOTE:
ADS DEADLINE IS THE
1st OF THE MONTH
PLACE YOUR ADS BY
PHONING ANDY AT 591-7622
Classifieds Editor**

CLASSIFIEDS

01 November 95

AIRCRAFT FOR SALE:

**Davis DA2A, 386TT, C-85,
11.5 SMOH, cruises at 110
mph, all metal, low wing, V-
tail \$11,900.00
J. Bradley 839-5542
10/95**

**Taylorcraft BC-12D, 1946,
Jim Robinson
(613) 830-4317 95/4**

**Cessna 150, 1966, 3500 TT, 1000
SMOH, recent paint, fresh C of A
\$16,500.00
Mike Sacoutis (613) 729-3774.
94/10**

PROJECTS FOR SALE:

!!! NEWCOMERS !!! Looking to start or finish a project? These partial to nearly completed projects **will save you years of building time and barrels of money.**

**11AC Chief Project,
60% done, new parts
Lots of parts, mags (new) Tons of
A/N/ hardware 613-675-2301
Larry Loretto 613-737-2933
95/11**

**Aircraft working tools
Alex Clanner 736-0555**

PARTS FOR SALE:

From Tim's parts bin

KR-2 Canopy frame \$50.00
Cleco pliers, USA, new. \$10.00
Bute-dope, insig. white, gallon
unopened, bahama blue \$40.00
Automatic pilot gyro, Piper,
horizon unit P/N 52R21 \$100.00
Autopilot gyro, Tactair, horizon
\$100
Mach meter \$50.00
C. tach, 0-3500 rpm \$30.00
ASI, hi-speed, 0-300 mph \$30.00
Control panel, three levers
with bowden cables \$20.00
Brake disks, chrome, C-150, for
six hole 3 piece wheel. \$200.00
Rudder pedals, Mooney,
castings only \$20.00
VSI, 0-6000 fpm \$100
Operators handbook, Beech
Sierra 200 B24R \$20.00

**Tim Robinson 824-5044
94/10**

From Ron's Parts Bin

Lots of parts: Throttle cable,
mixture cable, cabin hot and cold
air cables, electric flap motor
c/w transmission Cessna 150,
control yoke assembly, 2 sets of
seat tracks & doublers from
Cessna, main landing gear shims
Cessna, 2 Grumman canopy
tracks, COM and VOR antennae,
inspection covers Cessna.

**Clecos all sizes. AN hardware all
still available 10/95**

Ron McMillan 837-6865.

From Garry's Parts Bin

Shoulder harness, inertia reels,
seat belts, metal to metal, like
new,
NACA air inlets
Elevator trim assembly
Primer
Fuel pump, Pesco
Voltage regulator
Aluminum tank, 5 gallons
CHT guage & probe
Engine VW 1600cc rebuilt
Fuel selector valves.
Parking brake valve.
**Accelerometer (G-meter) 2 1/4
inch.**

Randolph butyrate dope in
unopened gallon containers: 1
gallons clear;
1 gallon Piper Lockhaven yellow
(Maule yellow); 1 gallon insignia
blue.

- 2 large oil coolers (~8x9")
- 1 hydraulic pump
- 1 vacuum pump
- 1 accessory case, Lycoming
dual adapter for above pumps.
- Spinner, pointed, 11" base.
- piston rings for Continental E-
185-3.

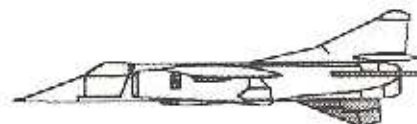
Cylinders, four, Lycoming
10/H10-360, wide deck, fresh
chrome.

Propeller, Hartzell HC82XL-2C
constant speed plus governor for
320 - 360 Lycoming engines.

Garry Fancy (613) 836-2829

Butyrate dope, 5 gallon pail, new
8?

**Mike Sacoutis
(613) 729-3774. 94/10**



PROPELLERS:

Harzell constant speed - HC82VL-1D1 to fit O-320 plus governor and vernier control, zero timed. OFFERS.
Mike Sacoutis
(613) 729-3774.

Propeller, Hartzell HC82XL-2C constant speed plus governor for 320-360 Lycomings
Garry Fancy (613) 836-2829

Propellers, VW 48/30 & 60/38, wood plus adapter for 1600cc VW engine.
Jacques Pilon (613) 446-4175

ENGINES:

O-300A 1750 SMOH, O-300C bottom end.
C-85-12 Continental 1200hrs
Propellers for above
Exhausts for above
Mike Sacoutis (613) 729-3774.

Engines, VW 1600 cc, Continental 2 cylinder ground power unit 30 HP.
Jacques Pilon (613) 446-4175

Rotax 297, 28 hp with propeller
J. Bradley 839-5542 95/10

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