



Skywriter

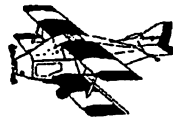


Monthly Newsletter of the Calgary Ultralight Flying Club

January 1990

View From Above

by Paul Hemingson



Its 1990. Do you know where your Club is?

The annual elections(?) were held at the December 6, 1989 meeting. Here are the official results:

President:	Paul Hemingson
Vice-President:	Gord Keegan
Treasurer:	Gord Tebutt
Secretary:	Gord Sorenson
Director:	Jim Creasser

Thanks to Gord Tebutt for doing an excellent job of trying to ferret out candidates as well as conducting the election.

I am proud to serve as your new President, even if I did win by acclamation. Either I'm good or no one else wanted the job. Don't answer that question. Now I get to write two columns: this one to which I've given the lofty title of "View from Above", and the regular fare called "Safety Corner". In this "View from Above" I would like to comment on a number of items. Like people, events and things of general interest.

First people, or is it people first. Outgoing President Gord Keegan has done a terrific job. It will be a hard act to follow. Gord placed the foundation of this Club on which it will be my task to build some kind of framework. But I need help. I am asking for some member input and assistance.

With lots of helping hands no

one will have to block out much time. We are all busy. I would like to find some bodies to do such things as mail out the newsletter, conduct the pre-meeting phone alert, conduct presentations, contribute to the newsletter, arrange for guest speakers, etc. This is our club and only as good as we make it. What are your expectations? Since becoming President I have been asking myself some fundamental questions. Why does the club exist? Why be a member? What's in it for you?

As I see it, the club exists to serve its membership. It does this in a number of ways. Firstly, the club exists to educate, to inform and to provide comradery among like-minded individuals. Secondly, I think it has a duty to act as spokesman for its members in matters dealing with UPAC and Transport Canada.

For your \$15.00 annual membership fee you get twelve newsletters, monthly meetings, informative talks, exposure to the latest trends and flying events to attend if you wish. Safety is promoted and is the overriding premise behind all actions.

In summary, it is the perfect place to become a BETTER and SAFER pilot. It's a bargain, and it's a lot of fun. We are

only short- changing ourselves if we fail to come out to the meetings or attend events or participate in club activities.

About events. I think 1989 was a good year. We had lots of fun and thrills, and we are all a little wiser with more hours in our logbooks. Some new regulations and rules are proposed and the concept of mandatory insurance was introduced. The controversy around the new rules is good. With a broad range of opinions, the more in-depth the discussion will be, and the end result should be reflected in the legislation.

So, one wonders what 1990 will bring. Lot's of great flying weather would be nice. Safer flying too, as we learn more about all the stuff one needs to know. Our record from the past year looks pretty good, but there is always room for improvement. Throughout 1990-1991 UPAC will be working with Transport Canada to help make the "Ultralight Plane Policy" a reality by the proposed date of January 1, 1992. One of the issues to be worked out is the notion of "self-regulated airworthiness controls (which includes training) by the ultralight community. The increased weight provision and passenger-carrying capability also need to be addressed.

I think our club has a roll to play. Our membership includes a good crosssection of both new and old private pilots, dealers and commercial pilots or trainers. We should be able to comment knowledgeably on these issues and provide meaningful
(continued on page 2)

(View From Above continued)

info to UPAC and Transport Canada. More on this in later issues.

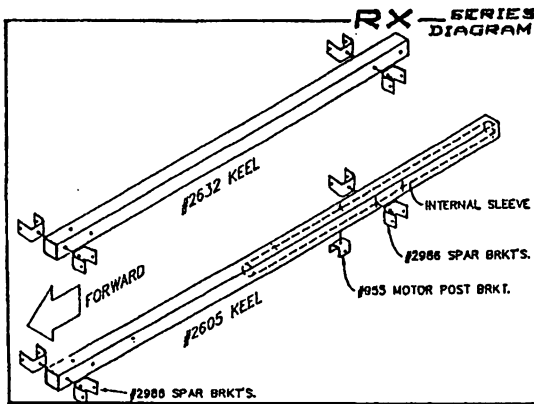
Maybe it was the weather. Maybe the time of year. The annual Christmas gathering was held Saturday, December 9. The problems is, hardly anyone came; only eight members and their guests. The few that came enjoyed lots of good food, cheap booze, great facilities and witty conversation. It was a real pleasure to attend. The Then brothers are closer than

Orville and Wilbur Wright, but ten times funnier. Louise Nesterenko is a great catalyst for spontaneous conversation. It loses something in the translation; you had to be there.

1990 DUES are due now!

Use the attached form to renew you membership now so that you will not miss the next newsletter!

Beaver RX Enterprises Safety Bulletin Mandatory Replacement of Spar Brackets Urged



Mandatory inspection of Part #986 spar brackets on all Beaver RX-28, RX-35, and RX-550 craft built prior to March 18, 1987, has been upgraded to mandatory replacement of these parts. The material was changed to 4130 chrome moly steel on March 18, 1987, and should not affect aircraft delivered after this date, says the company.

Fatigue cracks can occur in the aluminum brackets which are hard to detect under the fender washer.

Beaver RX Enterprises recommends immediately replacing all aluminum brackets with steel to eliminate this problem. Any steel brackets currently installed do not need replacement.

Beaver Enterprises will provide the new steel brackets at a reduced cost to all owners of Spectrum Beavers. Cost per bracket is \$7.50 including postage and handling for both dealers and customers. Please send your mailing address and aircraft's serial number to Beaver RX Enterprises Ltd., 3-9531 192nd Street, Surrey, British Columbia, Canada V3T 4W2.

If aircraft must be flown prior to replacement, mandatory preflight inspections of these brackets must be done prior to each flight.

This bulletin is reprinted from Ultralight Flying, October 1989.

- Editor



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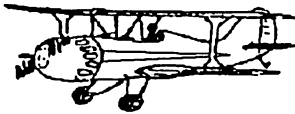
Skywriter is the official publication of the Calgary Ultralight Flying Club and is published 12 times per year. Articles and letters to the editor are very welcome from any readers. Address correspondence to:

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Meetings of the Calgary Ultralight Flying Club are held the first Wednesday of every month at the R.C.A.F. Association, 110 - 7220 Fisher Street S.E., Calgary at 7:30 PM.

Editorial

by Bob Kirkby



Ode to the decade of the Ultralight

In an interview conducted only hours before his murder, John Lennon said: "Weren't the seventies a drag? I'm looking forward to the eighties because I think we'll see some of the excitement of the 1960's return."

Although Lennon wasn't necessarily talking flying, his words proved prophetic none the less. The 1980's began with the crest of the Ultralight wave that had built up during the late 70's. The ultralight had suddenly become not only the hottest item in the general aviation industry, but thanks to Barbara Walters and 20/20 it had also become the hot potatoe as well. Ultralight manufacturers were springing up everywhere, most copying another, and the media and most general aviators were doing their best to shoot them down.

The movement, however, developed so much momentum that even Transport Canada decided it had better acknowledge the ultralight, and in 1983 introduced the first Air Regulations defining the ultralight category of aircraft and pilotage.

The crest of the wave broke rather suddenly with the brutal recession that hit North America, and especially the aviation industry. The subsequent decline in demand for light aircraft knocked out most of the players in the

ultralight arena. Even in general aviation, we saw the demise of the venerable Cessna 152.

The mere fact that you are reading this newsletter, however, is proof that the ultralight has passed the most rigorous test of all. That of market supply and demand through a recession and the subsequent recovery. As we leave the 80's we see the ultralight industry on the rebound with much more stability and as much vigour as it had at the beginning of the decade. It would seem that Holmer Kolb, John Moody and Lyle Byrum were on track after all.

In his book, "Hidden History", Daniel Boorstin writes of the role of the amateur in American history. He says that it is the amateur's love and passion for what he does that has been the font of creativity in America. This is what fuels the ultralight movement. I believe in the 90's we will see the ultralight movement flourish, because it has provided the amateur aviator with the ability to fly like never before.

I began the 80's dreaming of flying, as I had since my youth. I end the decade not only having acquired the ability to fly but also having built two ultralight aircraft. Amateur aviator, yes, but aviator none the less.

Let the excitement continue into the 90's.

Carburetor Alert

A CGS Hawk flying in eastern Canada suffered damage during a forced landing as a result of an engine failure.

The owner of the Hawk had apparently installed extra long fuel bowl overflow tubes of approximately 2 feet. Some fuel apparently entered the overflow tubes, which is not unusual, but because of the extra length

a siphoning effect caused fuel to continue to exit the float bowl. The engine quit due to fuel starvation. If you have a Bing or Mikuni carburetor, do not extend the overflow tubes!

This incident report was very kindly passed on the us by Ernie Smith with Transport Canada in Edmonton. Thank you, Ernie.

Classified

ABC Ballistic Chute - never used, hermetically sealed, excellent, new \$1900., offers. Paul Hemingson 931-2363.

Beaver RX-550 - 2 place, Rotax 503 air-cooled engine, pitot airspeed, altimeter, tach, EGT, CHT, Hobbs, hydraulic brakes, wheel pants, custom paint, ballistic chute, wing covers, less than 200 hrs., always hangared, never damaged. Hangar space available at Black Diamond. First \$10,000. offer flies it away. Call Gord Keegan, H. 242-7791, W. 265-3636.

Fisher FP101 - fantastic flying ultralight yet looks like a conventional aircraft. New, fly it away. \$7000. Ralph or Wayne Winters 936-5347 or 238-0406.

Boom Mic - M-87 low impedance dynamic microphone, fits most headsets, new, 2 available, \$25. each. Bob Kirkby 226-0720.

Braid for shielding spark plug leads and ignition wires, \$2. per foot. Bob Kirkby 226-0720.

Hagar Wheels - 1 pair of 6" Hagar wheels, new, \$40. Bob Kirkby 226-0720.

Chinook Parts - brakes, fuselage landing back, some damage to a wing, make an offer. Sky Master 335-3306 or Gord 293-7990.

Ivo Prop - 3-bladed, ground adjustable pitch, 56" diameter, composite blades, L.H. tractor or R.H. pusher, new, \$400. Jim Creaser 226-0180.

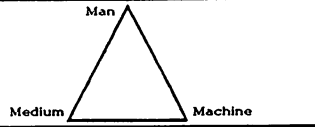
Classified ads for aircraft and related equipment are free to CUFC members. Call Bob Kirkby to place an ad.

1990 DUES are due now!

Don't wait for spring - renew now! Otherwise you might miss the next issue of Skywriter.

Safety Corner

by Paul Hemingson



All Talk Radio

In last's month newsletter, I reviewed the licensing, installation and basic sources of info to learn about radio, specifically, VHF aircraft radio. The primary reason for considering radio is communication. Two-way radio allows for getting clearances, instructions, messages and acknowledgements. But it's likely few (if any) of us will want (or get) to fly into controlled airports. So why radio?

One major reason would be to announce your intentions at uncontrolled airports, which more of us frequent. To this you could add receiving the ATIS, en route weather and emergency measures. Beyond this, the reasons get pretty weak; still, it might give you some peace of mind to monitor the traffic at some area or have the ability to talk to a fellow pilot to indicate your intentions. It all comes down to weighing the cost of radio versus the benefits. Radio is not for everyone.

There are a lot of sound reasons for not getting into radio. For example, you have no desire to get into or near controlled airports; or the uncontrolled airports you frequent have little traffic and most of it is NORDO; or the weather you take off in is the weather you land in; or the additional weight penalty, cost and maintenance requirements are too much; or hearing all the chatter on the airwaves is too distracting.

I'm not sure where the balance lies. There seems to be good reasons both for and against. I think it boils down to a personal decision based on the kind of flying you do and the areas you fly around, into or under. We need to consider our motives carefully before buying the latest gadget.

This month's article is directed at those who want to get into radio. How to use it? When to use it? Why to use it? Properly!

For those not interested in radio, this article contains some good info on control zones in the Calgary area and basic rules of the air.

Figure 1 is a map showing the VFR terminal procedures to get into and out of Calgary. I'm not suggesting that you want to get into YYC; I doubt you'd get permission. Besides, I think we should keep a low profile. The reason for Figure 1 is to show the control zones and recommended traffic routes in the area. Knowing where and how the big machines enter/exit the Calgary area is good information. Forewarned is forearmed. Study Figure 1 and take a mental picture. Note

the Bow River corridor between Calgary and Springbank. There is a lot of east-west traffic through there. Note the words in the upper right-hand corner. Inbound flights at 5,000 feet ASL and outbound flights at 5,500 feet ASL. A 500 foot separation. If you are considering flying north-south through the narrow space between the Calgary and Springbank control zones at 1,000 to 1,500 feet AGL, I'd recommend keeping a sharp lookout for traffic at the 3 and 9 o'clock positions. A mid-air broadside can ruin your whole day!

Also note the outbound arrows to the northwest practice area which straddles Highway 22. It might be a good idea to alert Springbank tower that you are travelling through these areas. Close to Springbank, most aircraft are on Springbank frequency and will also hear (continued on page 5)

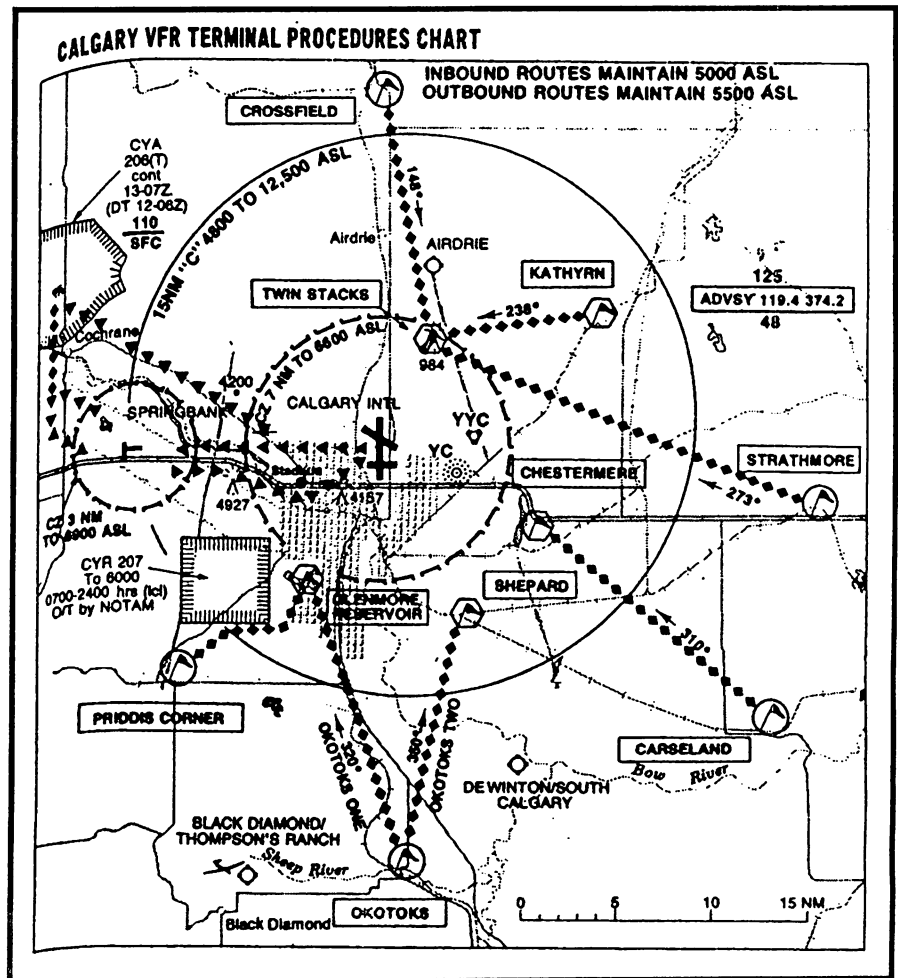


Figure 1. Calgary VFR Terminal Procedures Chart

(Safety Corner continued)

you, and/or be notified by the tower. It is a good idea to sit up a bit and open your eyes another F-stop around control zones.

Another thing to note on Figure 1 is the "outer control zone" centred on Calgary. The radius is 15 nautical miles and it's base is 4,800 feet ASL. "Never fly this high", you say? Well, there are several transmission towers extending to 5,000 feet and ground elevations on the west side of the city exceed 4,000 feet. The point is, sometimes you might find yourself in this zone. A good strong updraft can boot you up to 4,800 feet ASL quite easily. There is something unsettling about "going up" in an updraft that's not in your plan. Maybe we all have an umbilical cord to earth that we fear has been severed. Glider pilots get a different kind of rush out of this - their umbilical cords must be longer.

Rules of the Air

Before we can talk about the proper use of radios, a basic review of the circuit procedures seems timely. Figure 2 shows the basic circuit. The rules of the air (unless otherwise directed) for circuits are:

- 1) flown at 1,000 feet AGL
- 2) left hand
- 3) entry is made into downwind leg.

This accepted procedure is designed to maximize safety. You get a chance to observe other traffic, and since all aircraft are moving around in the same direction, the closing speed between aircraft any other way will be sure to create havoc and cause some interesting collision avoidance manoeuvres. A good way to feel about three microns high would be to fly the circuit haphazardly, and then, when you land, listen to the other pilots lay some descriptive adjectives and verbs on you.

Aircraft with two-way radio should announce their intentions well outside the control zone - at uncontrolled airports about five miles out. Other traffic in the area is then alerted to your intentions and will look out for you. Beware, though, of the NORDO aircraft. Don't fall into the trap that just because you have a radio, all others do. A good practice might be to fly as if everyone else is NORDO.

To communicate effectively, two-way radio has some

conventions that should be understood. The message received that's different from the message sent is potentially dangerous. Your radio operator's handbook tells you that there are four parts to a message: the initial call, the reply, the message and the acknowledgement. This is true for the order of the message. For the content of the message there are also four parts. Here's how I remember the four parts:

- 1) who you are
- 2) who you are calling
- 3) where you are
- 4) what your intentions are.

Many pilots forget one of these four parts. Think before you transmit. With a little listening and practice, that's all there is to it, whether you are talking to a controller or transmitting blind to an uncontrolled airport.

At uncontrolled airports, no controller exists. There may or may not be a UNICOM station. These airports may have a mandatory frequency (MF) or Aerodrome Traffic Frequency (ATF) assigned by Transport Canada. The purpose of this designated frequency is so that all radio-equipped aircraft operating on the ground or within a specified radius (ATF area) listen and transmit on a common frequency and follow a common reporting procedure. The Canadian Flight Supplement (CFS) lists all such airports, including all the necessary info. I've included a page (Figure 3) from this supplement that explains the situation in more detail.

Some typical conversations are reprinted below. These will give you some idea of the order and content of messages.

Typical Transmission at Uncontrolled Airports

Pilot: Okotoks traffic, this is ultralight India Alpha Bravo Charlie, five south at 5000 inbound for landing.

(and a few minutes later - after monitoring the frequency, observing traffic and determining which is the active runway:)

(continued on page 6)

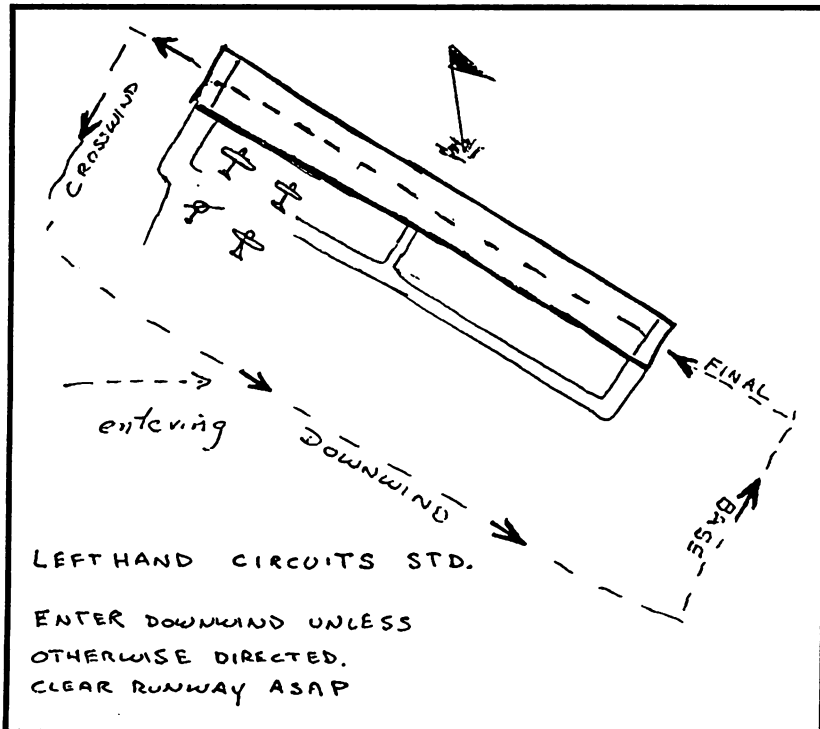


Figure 2. Standard circuit procedure.

(Safety Corner continued)

Pilot: Okotoks traffic, this is ultralight India Alpha Bravo Charlie, joining downwind for one six.

The pilot then simply keeps a sharp lookout (for NORDO and radio aircraft) and lands.

At Controlled Airports

(assuming you have prior permission)

Pilot: Springbank tower, this is ultralight India Alpha Bravo Charlie ten north at 5000 inbound for landing with information kilo (note the initial call is made outside the control zone).

Tower: Alpha Bravo Charlie, maintain 5000 following Highway 22. Report over Bow, watch for hang glider activity Cochrane Hill.

Pilot: Alpha Bravo Charlie.

(a few minutes later:)

Pilot: Springbank tower, Alpha Bravo Charlie over Bow.

Tower: Alpha Bravo Charlie, continue inbound following first set of powerlines to join downwind two five. Follow the 172 just turning downwind.

Pilot: Alpha Bravo Charlie.

Pilot: Alpha Bravo Charlie in the downwind for two five.

Tower: Alpha Bravo Charlie, number three, report traffic.

Pilot: Alpha Bravo Charlie has the traffic.

Tower: Alpha Bravo Charlie cleared to land.

Pilot: Alpha Bravo Charlie.

Note how the pilot responded to air traffic directions and clearances. You must acknowledge clearances. The best way to learn the lingo is to listen in to conversations, to hear how to receive and acknowledge clearances.

Say Again

Here are some final tips for proper radio procedure and discipline:

1. Prepare ahead (know the frequencies, traffic patterns, etc.).
2. Think before transmitting (compose your message).
3. Listen in on the frequency to get an idea of what's going on before transmitting.
4. Don't step on other transmissions or interrupt a sequence between others.
5. Don't clip your transmissions (i.e. key the mike before you begin to speak).
6. Use phonetics and phraseology correctly.
7. Be brief.
8. Speak clearly and concisely.
9. Acknowledge all clearances and instructions.
10. Do not transmit in unauthorized fashion (profanity, etc.).

Fly safe.

Graduating Air Cadet Night

The R.C.A.F.C. is sponsoring a flying information night for the graduating Air Cadets. CUFC will be involved as well as most of the other flying related associations in Calgary. Contact Gord Keegan for more information.

SUMSPOT AREA TWB
TWB ON 403-995-XXXX, ON "L" NDB AND ON VHF FREQ 123.45. WX FOR LESTER B. PEARSON, TORONTO ISLAND, ST. CATHARINES AND PETERBOROUGH. TML FCSTS FOR LESTER B. PEARSON, WINDSOR, BUFFALO AND WIARTON.

MANDATORY FREQUENCY (MF)
TRANSPORT CANADA HAS DESIGNATED A MANDATORY FREQUENCY (MF) FOR USE AT SELECTED UNCONTROLLED AERODROMES OR AERODROMES THAT ARE UNCONTROLLED BETWEEN CERTAIN HOURS. AIRCRAFT OPERATING WITHIN THE AREA IN WHICH MF IS APPLICABLE, ON THE GROUND OR IN THE AIR, SHALL BE EQUIPPED WITH A FUNCTIONING RADIO CAPABLE OF MAINTAINING TWO-WAY COMMUNICATION.
NORMALLY, MF'S WILL ONLY BE DESIGNATED AT AERODROMES SERVED BY A FSS, CARS OR RFSS, AND THE MF WILL NORMALLY BE THE FREQUENCY OF THE GROUND STATION WHICH PROVIDES THE FLIGHT INFORMATION service for the aerodrome.
The radius from the aerodrome centre and the vertical limit of the airspace above sea level (ASL) within which the Mandatory Frequency (MF) applies will be shown in the "COMM" sub-heading.

AERODROME TRAFFIC FREQUENCY (ATF)
An Aerodrome Traffic Frequency (ATF) is normally designated for active, uncontrolled aerodromes that do not meet the criteria for mandatory frequencies. This is to ensure that all radio equipped aircraft operating on the ground or within the specified (ATF) area, are listening on a common frequency and following a common reporting procedure. The ATF will normally be the frequency of the ground station where one exists or 123.2 MHz where a ground station does not exist.
The radius from the aerodrome center and the vertical limit of the airspace above sea level (ASL) within which the ATF applies, will be shown in the "COMM" sub-heading.

MF/ATF CALL SIGN
In many instances the frequency listed under MF or ATF will be preceded by a "call sign". This will indicate the agency to which a transmission would generally be made. Where the call sign "traffic" is indicated a ground station may not necessarily exist. An advisory broadcast transmission should be made in this instance.

MF/ATF INITIAL CONTACT
It is recommended that pilots establish and maintain radio communications on the appropriate frequency prior to entering the area within which the MF or ATF applies.

FLIGHT INFORMATION SERVICE
The Air Traffic Services Branch operates facilities which provide flight information services to enhance flight safety and efficiency. These facilities include:
(a) FSS
Flight Service Stations staffed by Flight Service Specialists are located at some aerodromes across Canada. The services they provide are: enroute flight information, airport advisory, vehicle control, remote vehicle control, flight plan, surface weather observing, VFR alerting, aeronautical broadcast, navigation assistance, navigation aids, NOTAM, PIREP (Pilot Weather Reporting), fixed telecommunications and paid communications.
(b) RFSS
At some uncontrolled airports where traffic does not warrant a FSS the required flight information services are provided through the use of remote communications. This facility is referred to as a Remote Flight Service Station. Flight information services provided through the RFSS are the same as the FSS except vehicle control and fixed telecommunications are provided remotely while surface weather observing may be done by agencies other than FSS.
(c) RCO
Remote Communications Outlets are remote VHF transmitters/receivers established where difficult communications prevail, such as in mountainous areas, or where an extended communications capability is necessary in the interest of safety. A RCO is primarily used to provide a remote enroute flight information service but may also be used for: IFR position reports, relaying ATC clearances, to pass company messages, to supplement the international HF networks, and to provide limited airport advisory.
Note: See AIP Canada RAC 1.0 for details.

UNICOM:
A UNICOM, an acronym for Universal Communications, is an air/ground communication facility operated by a private agency to provide Private Advisory Station (PAS) service at uncontrolled aerodromes and airports with no ATC or FSS air/ground communications. At these locations 122.8 MHz and 123.0 MHz are the first and second choice Private Advisory frequencies respectively. In congested areas, operation as a Private advisory Station on the Aviation Instructional Station frequencies 123.3, 123.4 and 123.5 MHz may be occurring.

Figure 3. Info from Flight Supplement

Fly Paper

by Gord Keegan



Since newsletter editor, Bob Kirkby, has kindly consented to let me be a regular contributor to the "Skywriter", I would like to take this opportunity to express my heartfelt congratulations to our new executive. President Paul Hemingson is already hard at work on some very interesting ideas and it was terrific to see Gord Tebbutt and Jim Creasser continue in their positions. We are all looking forward to a great year of fun flying. I am honoured to be asked to be Vice-President and look forward to contributing to the club in any way I can.

This month I would like to talk about ballistic parachutes. Some of the newer pilots may not even be aware of what they are or how they work. When I first started flying ultralights a few years ago, I remember how impressed I was with the concept of bringing an aircraft down under a canopy in case of an emergency. I also remember that I promised myself that I would never fly an ultralight that was not so equipped.

Over the years, I have noticed changes in my own thinking and in attitudes towards this important piece of safety equipment. Because I have flown so long without ever

being in a situation that would necessitate chute deployment, I find that my resolve to never fly an ultralight without one is starting to wear a little thin. Because there have been no incidents in this area recently that would have called for "pulling the pin", I am seeing very few installations on new machines that are being built. Personally, I do not think this is a good trend. Let me give you some examples of where "hanging out your laundry" may be a prudent thing to do.

Your elevator cable, turnbuckle or control horn breaks in flight. Unless you are real nimble at jumping back and forth between the seats in a tandem aircraft (few of us have trim tabs that could substitute) the chute may be the only way out.

You are involved in a mid-air collision where control of the aircraft becomes impossible. Time to let 'er rip.

These are some good reasons why we should carry a chute. Next month I would like to discuss the different types of chutes available and problems that may occur with them.

Until then, keep the blue side up.

hang glider with motor manufacturers. Lyle Byrum made the Quicksilver which was a good, well built, wire braced hang glider with a motor. The obvious reason so many people bought these craft was that it could be assembled and flown in a weekend ("no holes to drill"). There were many other reasons people bought this type of ultralight. Some examples are: people tend to buy the type of aircraft they train in, a local dealer close by for advice, parts and service. Lots of customers were fooled by this misconception. Some dealers, and we had our share in Calgary, once they had your money in their pocket, wouldn't return your phone calls, never mind parts and service.

While all of these flex wings were being sold, others were buying rigid wing ultralights (such as Lazair, Kolb, Mitchell Wing, Hiperlight, Cuby, N3, J2, etc.) Why do you suppose all of these kits were sold. Was it price? No, I don't think so. Some were as expensive or more than a flex wing. Was it because of a local dealer? In many cases it was. When we were selling Lazairs in Calgary, the Quicksilver dealer was starving to death. But conversely, Homer Kolb has sold over 1200 kits and almost all were sold by mail direct to the customer. What is the real reason? The fact is a rigid wing airplane does have much better performance in all respects. This was recognized by most in the 1910-1920 era and by all in the 30's. There were no flex wing aircraft, that I am aware of, sold after 1930, except a few homebuild plans.

Also a rigid wing doesn't have to be mated to a welded steel fuselage. To name a few that are not: Fisher, Team, Yarrow Arrow and Pelican. So don't think all rigid's have steel fuselages. Don is right though, when he says that a big selling point on rigid is that they have a welded frame. This is, in my opinion, a big selling point. Piper used this selling point to sell more two seat trainers than any other manufacturer. Must be something to this "welded frame" you say? Yes, I say there is no better, stronger, lifetime airframe made with years and hours of use to prove
(continued on page 8)

Letters to the Editor

Editor's note - the Letter's column is new this month and hopefully I will have something to fill it with every month. This is a forum for you to air your views on any pertinent subject. Send your letters to the Editor for inclusion.

Rigid or Flex Wings (another perspective - ed.)

I would like to address some of the statements made by Don Richter in the December issue of Skywriter, entitled "The Real Difference Between Rigid and Flex Wings".

Starting with the history of ultralights, Holmer Kolb was

flying the Kolb Flyer in 1973-74 with a rigid wing, welded steel front fuselage and aluminum tail boom. John Moody is credited with the first hang glider with a motor in 1976, his Easy Riser, which was a rigid wing biplane. Then came Lyle Byrum, Chuck Slyczarchuck of Chuck's Glider Supply (CGS), and a whole slug of other

(Letters continued)

it. Yes, if you "smack" it or it "flies out of the sky doing a tail slide", you will have to have it repaired if you can't do it yourself. But, because of the vast improvement in handling, flying and performance, the chances of "smacking" are lessened considerably.

A rigid wing aircraft kit may take as long as 250 to 350 hours. But, this time depends on how much work you are doing and how much you are paying for. Example: a Hiperlight kit takes as little as 75 hours to assemble and the Kolb Firestar kit as little as 125 hours. The difference (in hours) is why you pay twice as much for the Hiperlight kit. Don is right, some rigid wing kits take a minimum of 250 hours or more but rigid is not necessarily the time factor. Rather, it is how much the factory has done and how much you do yourself.

As far as anyone saying "you can leave a rigid wing outside" is concerned, I don't believe anyone has said this. If so, don't believe them. It's not the Stits you have to worry about (not all heat shrinkable Dacron fabric is called Stits, some other names are Ceconite and Hypec), but the fact that all ultralights are light and can not be strapped from "working" in the wind. While the Hipec covering system has been left outside for 20 years, it's the hinges, control rods, rod ends, etc. that are worn and damaged by the wind working on the control surfaces.

Someone might have said "if you had to leave an ultralight aircraft outside, it best be a rigid wing with a welded steel fuselage and Hipec covering because this is a lifetime airframe and covering, just as on your J3, Taylorcraft, etc., and will stand the test of time (no re-invention needed).

Let's talk performance. Flexible wings means flexible both spanwise and chordwise. Not only do the wings flap (spanwise flex) but they bulge (chordwise). This changes the airfoil as you go faster or increase the load. The Princeton Sailwing, as found on the Zenair Zepper, was designed to change airfoil shape the faster

it went (less drag). But to your average flex wing ultralights this airfoil change is a detriment to performance (increased drag and reduced speed).

Climb you say is "basically the same". What is climb. Is it the reading on your VSI or the time to climb to a given altitude with a distance factor entered? Rate of climb in a Quicksilver single place machine with a 377 engine might be about 800-1000 feet per minute. Rate of climb in a Hiperlight with a 277 engine (smaller engine) may also be 800-1000 feet per minute. Are they performing equally? Most of you know the answer is no. More information is needed; climb speed, angle of climb, ground covered, etc. The Quicksilver is a very draggy aircraft and the Hiperlight is very clean. You can't expect equal performance from two totally different machines, even if the rate of climb is basically the same.

"Stall rate" or performance is determined not only by how the wing is built, although wing design and airfoil shape are major contributors, but also by weight, angle of incidence, washout, taper, dihedral, sweep, drag, etc. "Roll rate" also also has several determining factors, wing and aileron design being the most important two. Roll rate is a factor of aileron and rudder responsiveness so the whole aircraft design enters into the formula. A cleaner, less drag (read rigid), wing will perform all functions better than a flexible wing.

Again Don is right when he says "all types of ultralights have their place in the market". Each prospective ultralight owner should look at the facts, brush aside the BS and pick the craft that suits his needs, wants and pocketbook. Let us (CUFC) provide this information to prospective buyers without adding misinformation. Opinions should be qualified as opinions, not facts.

I have saved the worst until the last. I quote "an aircraft that is being held hostage by the infamous Rotax 'when they

crap out you're screwed' 2 cycle engine" and "proven unreliable engine". I take exception to these remarks. They are defamatory, untrue and for a person in the business very unprofessional.

Too many people in this world expect a machine to operate indefinitely without proper maintenance. This is why in the real aircraft world, time constraints are put on the engines, overhaul and maintenance. Otherwise Cessnas and Pipers would have the same things said about them. I have found the Rotax engine to be extremely reliable (no forced landings for the years 1983, 84, 85, 86, and 87 in my Kolb with a 377 Rotax. To make a statement like "when they crap out you're screwed" leaves me dumbfounded. I thought all flying instructors taught their students to be prepared for an engine failure at any time and to not put yourself in a position otherwise.

Can you imagine an airline pilot calling his Rolls Royce turbine the "when they crap out you're screwed" engines. It is true for him but he wouldn't say it. This type of attitude is certainly not needed in our sport. I would suggest that Don buy one of a competitors engines and then find out how good the Rotax engines are.

We, at Airlight Aviation have delivered 117 rigid wing ultralights and one flex wing aircraft. This number, I suggest, might be more than all the flex wing aircraft in Alberta and certainly more than all the Beavers and Challengers. We let the customer decide, send him to the competition and give him the facts as we have nothing to hide. Yes Don, there is a place for all types of ultralights, but lets tell about the "real" real difference.

Our editor has asked me to write a regular monthly column, which I have agreed to do. I could use your help. If there is a topic you would like written about or any questions please phone me (226- 0180) or write them down.

Jim Creasser