



AUCKLAND REGIONAL MICROLIGHT AIRCRAFT CLUB

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SEPTEMBER 2008

CLUB NIGHT: **1930 hours TUESDAY 9th SEPTEMBER 2008**

Preceded by Committee meeting 1830 hours

Visitors are most welcome – dinner & refreshments available at the venue

VENUE: **Commercial Traveller's Club, 27-33 Ohinerau Street, Remuera**

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PREZ SEZ:

Hi all,

I don't want to speak too soon, but there is a hint that the weather may be finally starting to improve and one of the worst flying winters for some time may be almost behind us.

Unfortunately the weather caused the indefinite postponement of the Oratia Scouts' planned visit to the Mercer Airfield. It is hoped that this will be rescheduled for the first few months of 2009.

Due to the lack of flying, there is not much to write in this month's issue but hopefully with the improving weather we will be able to start organising a few events – turn your minds to what sort of activities you would like and we can discuss them at the club night.

*Happy flying & hope to see you at the Club night,
Steve Williamson*

CLUB NIGHT

This month's club night will include a refresher session on flight planning, so bring your flight computers, VNC (Charts), protractors and a pencil.

We will also be showing a DVD on 'Kiwi Red', the RNZAF Skyhawk aerobatic team (back when we had aircraft with a strike capability).

Don't forget that dinner is available from the kitchen at the venue; a good feed can be had for \$5 - \$8.

OVERHEAD JOINING PROCEDURES

Whilst Mercer procedures do not permit an overhead rejoin (due to skydiving operations) and Parakai also does not allow them whilst skydiving operations are taking place, the overhead rejoin is the standard joining for manoeuvre for microlights, which tend to operate from uncontrolled airfields.

The following article is reproduced from the July / August issue of Vector, the CAA safety magazine:

The overhead join will always be a vital ingredient in maintaining aviation safety at unattended aerodromes, and on most occasions it will be the best way to join. It takes very little extra time to join overhead, especially if you have planned for the most likely scenario. Then you simply need to confirm that the conditions are as you expected, and make good use of the opportunity an overhead join gives you to see other traffic.

The Overhead Join

The key to a successful circuit join is situational awareness. Get it and keep it. If you lose it, remove yourself from the circuit until you have it back.

Preparation

Be well organised and anticipate each step of the process. If you are planning to join an unfamiliar aerodrome circuit, then your preparation begins on the ground.

»» Study the appropriate up-to-date charts and AIP New Zealand, Vol 4 thoroughly.

»» Note any prominent reference points, spot heights and terrain that will be in the vicinity of the aerodrome.

»» Think about;

- aerodrome elevation,*
- circuit direction,*
- radio frequencies,*
- runway length, surface and displaced thresholds,*
- windsock locations, and*
- obstacles on the approach.*

»» Start forming a mental picture of how you will locate and approach the aerodrome.

Read the aerodrome notes in the AIP New Zealand, Vol 4, they provide local knowledge and highlight any legal requirements or special procedures.

Approaching the Aerodrome

Get the AIP New Zealand, Vol 4 out, open it to the landing plate and orientate it with respect to your heading. Review the runway layout and note the position of the windsocks. Descend or climb to joining height and aim to position so that you arrive with the whole aerodrome suitably positioned on the left of the aircraft. Make the appropriate joining call within five to ten miles of the aerodrome – ten miles is preferable. Keep this radio call brief to avoid unnecessary clutter – don't ask if there is any other traffic about.

Carry out your circuit joining checks. Maintain a good lookout around the aircraft and a continuous listening watch on the radio. Both are critical to a safe overhead join.

Keep in mind there may be non-radio equipped (NORDO) aircraft joining or already established in the circuit.

If parachute operations are being carried out, remain clear or consider other options, such as a wider circuit or joining straight-in on long final.

Formulate a picture of where other aircraft are and what their intentions might be. It can be helpful to make another radio call within several miles of the circuit – to let other aircraft know what you are doing.

Try to determine the prevailing wind direction by aircraft drift, smoke, dust, known circuit traffic and local wind reports. Don't let a preconception fool you though. You must identify the correct runway in use by sighting the windsocks. Do not descend until you are sure of the runway in use. Extra care should be taken in light or nil wind conditions. These are the days when different pilots may choose different (possibly opposing) runways. Look and listen for traffic already established in a circuit.

Avoid high rates of descent, high angles of bank, and high airspeeds at all times during your join – others will be trying to see you too.

Helicopter pilots – you have a special responsibility. Your machines are highly manoeuvrable and don't require a runway, but they can be difficult to see. The practice, by some, of approaching and departing at any old angle can be confusing for other traffic and could set up a dangerous situation.

Overhead

Keep the aerodrome a suitable distance on your left-hand side. It is generally easier to see the aerodrome layout and windsocks by making left-hand orbits. Don't get too tight in the orbit, and position yourself so that only medium angles of bank are required. You can take plenty of time to identify the correct runway – several laps of the aerodrome may be required. Wind direction and speed can vary significantly from one end of a runway to the other – check all windsocks when deciding on the most into-wind runway.

Overhead joining height (or greater) must be maintained until the letdown begins.

Confirm that you have identified the runway you intend to use correctly from the AIP New Zealand, Vol 4 plate and reconfirm the circuit direction.

The overhead radio call should be made when you have positively identified a suitable runway. From this point all subsequent turns during the letdown should be made in the applicable circuit direction. There is no need to include "letting down on the non-traffic side" in your radio call.

Descending

Look carefully for other aircraft in the circuit, and plan your letdown to ensure adequate spacing for the downwind leg. Aircraft already established in the circuit have the right of way. Aircraft training in a crosswind circuit are required to give way to into-wind circuit traffic.

If the position of other aircraft in the circuit doesn't allow you adequate spacing, continue circling at joining height until you are satisfied you can sequence comfortably.

Descend on the non-traffic side, planning to cross within the upwind threshold at circuit height. If the runway is long, it can be safer to cross more towards the centre of the runway, while leaving yourself enough time in the downwind leg. This will lessen the chance of conflict with any high performance aircraft on takeoff.

It is important to be at circuit height before crossing the runway – this makes it easier to see aircraft in the downwind leg against the horizon and eliminates the possibility of descending on top of other circuit traffic.

It is equally important not to descend lower than circuit height, to keep separation between yourself and any aircraft taking off.

Allow for wind so that you will track along the downwind leg at a constant distance from the runway.

Downwind

Make your downwind call and proceed with the remainder of the circuit as normal.

There is always the potential for a mid-air collision between you and traffic already established in the circuit, so an active scan must be maintained at all times. Remember to scan both inside and outside the circuit pattern for traffic.

Joining the Circuit Directly

At an unattended aerodrome or where an Aerodrome Flight Information Service (AFIS) is being provided, you may elect to join directly – under certain conditions:

»» the runway in use and aerodrome traffic are known; and

»» if radio equipped, joining intentions are advised to the AFIS or to "aerodrome traffic"; and

»» when sequenced to give priority to other aircraft already established in the circuit. If this is not possible, you must join via the overhead procedure; and

»» when entering or flying within the circuit, all turns must be made in the direction appropriate to the runway in use.

Joining straight-in does not allow you to view all the windsocks, inspect the surface condition of the runway, note any ground movements or hazards, or assess any other unexpected situations.

*If you do choose to join this way, **expect the unexpected.***

If you are familiar with the aerodrome you will already know whether joining overhead is appropriate.

If it is not local practice to join overhead, you should have no problem in joining the circuit directly (i.e. via the downwind, base leg, or final approach) by observing the movement of other traffic.

Make use of your local knowledge and maintain a careful lookout and listening watch for other traffic to help you determine your position in the circuit sequence.

FOR SALE

*Single seat Pelican. Easily rigged. Airframe: \$5,000
Engine: Rotax 508, 43Hp 4 stroke, approx 150 hours: \$5,000
Covered, weather tight, aluminium trailer (for Pelican): \$2,000
Full Lotus inflatable floats for Pelican: \$2,000*

Contact Jon Farmer, Ph (09) 5200641 / (027) 3490053

FOR SALE

Rans Coyote. Rotax 912, Ivoprop in flight adjustable, 91.6 hrs, 105 mph cruise, radio, headsets, life belts, well appointed A/C. \$ 75,000

Also 1/3 share of hangar at Paraki airfield \$ 30,000

All enquiries to Vern Booth, Ph. 09 416 0244



Instrument Flying..

Most people wish to fly on the old gauges at one time or another but are prevented by the high cost of the instruments necessary for this form of flight. The following is a more or less known and extremely simple method which may be used by all.

Place a live Cat on the cockpit floor, because a Cat always remains upright, he or she Can be used in lieu of a needle and ball instrument. Merely watch to see which way he leans to determine if a wing is low and if so, which one. This will enable you to your airCRAFT level in route with complete accuracy and confidence.

A duck is used for final instrument approach and landing, because of the fact that any sensible old duck will refuse to fly under instrument conditions, it is only necessary to hurl your duck out of the cockpit window and follow her to the ground.

There are some limitations on the Cat and duck method, but by rigidly adhering to the following check list a degree of success will be achieved which will not only startle you, but will astonish your passengers as well, and may have an occasional tower operator with an open mouth.

- Get a wide-awake Cat, most Cats do not want to stand up all the time, so it may be necessary to carry a fierce dog along to keep the Cat at attention.
- Make sure your cat is clean, dirty cats will spend all the time washing. Trying to follow a washing cat usually results in a slow roll followed by an inverted spin. You will see that this is most unprofessional.
- Old cats are the best, young cats have nine lives, but an old used up cat with only one life left has just as much to loose and will be more dependable.
- Avoid stray cats. Try to get one with good character because you may want to spend time with her.
- Beware of cowardly ducks, if the duck discovers that you are using the cat to stay upright, she will refuse to leave the aeroplane without the cat. Ducks are no better on instruments than you are.
- Get a duck with good eyes. Near sighted ducks sometimes fail to recognise that they are on the old gauges and will go flogging into the nearest hill. Very near sighted ducks will not realise that they have been thrown out and will descend to the ground in a sitting position. This is a most difficult manoeuvre to follow in an airplane.
- Choose your duck carefully, it is easy to confuse ducks with geese. Many large birds look alike. While they are very competent instrument flyers, geese seldom want to go in the same direction that you do. If your duck seems to be taking a heading to Ireland or Sweden, you may be safe in assuming that someone has given you a goose.