



Charles Petersen, a recovering sailboat racer who campaigned as crew and later owner on offshore keelboats, received his glider pilot licence in 1998, and now has 1700 hours in his logbook. He holds a Category I Instructor's endorsement, and instructs at York Soaring Association NW of Toronto, Canada. He has his three diamonds and a Lennie, and has flown in a couple of Senior Nationals in Florida, but enjoys the 'On Line Contest' most. He is President of the 'Youth Flight Canada Education Fund', a registered charity that offers advanced flying experience to youth with a licence at York. In addition, Charles also established the 'Freedom's Wings Canada' program, which partners with gliding clubs to provide no-cost 'Inspiration Flights' to those with a disability. This program provides flight instruction in adapted gliders for paraplegics. He enjoys mentoring pilots in cross country soaring, and putting grins on the faces of youngsters with an inverted experience.

Now 65, he has been retired for 10 years from a career in finance and venture capital involving a wide diversity of industries. He executes his family's aviation obligations, and leaves his wife to do the same for her golfing obligations. He winters in Florida at Seminole Lake, near Orlando, where he flies his Discus 2cT.

Almost all my 1700 hours in gliders has been in flatland country: Toronto in the summer and central Florida in the winter with a little time on the Allegheny ridges. But the mysteries of mountain flying have long intrigued

DISCOVERING

me; it is terra incognita, where vicious looking rocks, (closer to the wing tip than the pilot is), and a fickle horizon leave no doubt that a very different skill-set is required. And so it was that I went to the French national gliding centre at St. Auban in the Alpes of Haute

Provence. It was an amazing week, flying in a Nimbus 4D, an ASH 25 and a brand new Duo Discus XLT. But it was also frustrating; climbing up a rock face is no time to learn how to wrestle with the inertia of 26.5 metre wings, so the pro in the rear seat handled the more challenging segments. And when we gained a safer altitude, I felt like the RFO (the rich *#!%\$ owner) of the large yachts I sometimes raced against, as he was coached by the paid crew on where to steer.

A mind-numbing array of ridges and peaks, with foreign names was presented on tour, but after a while I lost track of their identities, their elevations, and the distances to the nearest airfield or champ vachable (field suitable for outlanding, or visiting the cows) with their elevations. I just didn't develop an understanding of the dynamics of the air mass movement on which our lift depended. So I left even less confident of my ability to fly in those mountains.

My next attempt to unlock these mysteries was to book a week with Gavin Wills in New Zea-

land last January, but an encounter with cancer forced the cancellation of that trip.

And so it was that I accepted the advice of a couple of pilots at Seminole Lake last winter, and booked a few days flying with the legendary Jacques Noel at a small club not far North of St. Auban, called Club de Vol à Voile de La Motte du Caire (www.cvvmc.fr). This proved to be an excellent choice!

The club is nestled in a small plain; the launches are by a very impressive winch that resembles a fire engine, and features a 422 HP diesel driving two drums of multi-strand steel cable.

Right off the wire there is some challenging ridge flying required to work up the stepping stones of the surrounding peaks. The club's web site states, "Our instructors are here to teach you the best way to do it and give you the tools you might need during later flights while low in the mountains". A subtle but important difference in philosophy - flying a humble Twin Astir or Janus glider allows one to fly hindered only by the lack of skills that are soon acquired.



MID-LAUNCH, A VISITING GERMAN GLIDER CLIMBS PAST LA BLACHÈRE

EUROPE'S BEST

Jacques e-mailed me 14 attachments before my arrival (one an English translation of the text he co-authored with his mentor Roger Biaggi, the rest in French). For example, he writes: *"Above the mountains you have all the advantages of normal flat-land cross-country flying plus the advantages that the mountains offer, like ridge lift at known locations, or wave. When you descend to or below ridge level the situation changes dramatically. The ground seems to come closer rapidly, a well defined horizon is no longer available, your view of the outside world shrinks, the lift becomes irregular and sometimes broken and so your level of psychological ease and comfort declines - sometimes dramatically. On a meteorological level, phenomena become clearer, stronger and easier to recognise. But sometimes, in periods of transition, they can be much more complicated"*.

I read the document several times, and I thought I had a grasp of the fundamental principals, but simply reading and understanding is one thing, - executing another. The figure eights one flies up the side of a ridge are a good example. While flying close in to the mountain, for close in

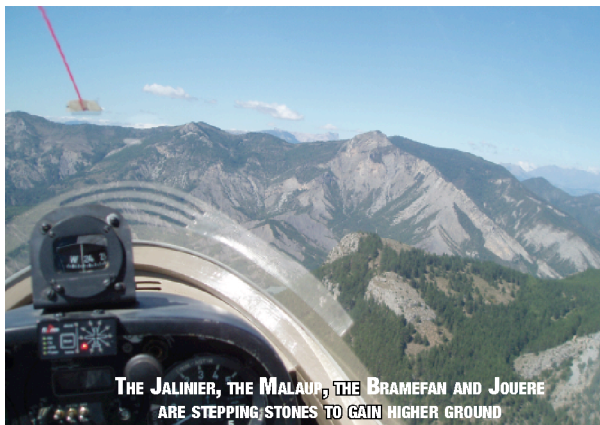
is where the lift is found, one must maintain a 'responsive glider', - sufficient airspeed to ensure control in case of an encounter with a dangerously strong gust, - up or down, requiring the control authority to escape immediately away from the rocks.

The turn away from the ridge should be in a surge of lift, and as the safety is enhanced by the increasing altitude above ground, the glider should be slowed down to maximise the benefit of the surge, until after completing a turn of about 225 degrees, one levels the wings to approach the mountain at about 45 degrees, again increasing speed to assure a responsive glider. That's the theory. Seems very simple, but putting it into practice was a challenge indeed.

A result of experience is the instinct it develops, - the ability to 'fly' the glider without constantly thinking about the mechanics. But a flat-lander's instinct can be tied to the perception of a constant horizon. So when I turned away from the mountain, the glider wanted to pick up speed in the turn. The drop in the

apparent horizon led me to allow this but from the back seat came "No, no, Charles! Slow up in the surge".

I levelled the wings when next approaching the mountain, and the glider wanted to lose speed, but it 'felt right' to let it, as my horizon rose before me



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- "Charles, don't slow up, - you must have a responsive glider".

That first day is not one of which I am proud, but it must have been more productive than it felt.

Jacques is the Chief Flying Instructor, and his job description seems to include everything. He often seems driven and frustrated while on the ground as he organises the launch grid, or drives the winch, or frets about the inefficiencies of the many potential glitches while gliders are launched, two in a row. The queue seems lengthy with numerous visiting gliders from Germany.

When all are in the air, and Jacques has had his lunch, it is again my turn. Once in the air, Jacques is transformed, - patient and encouraging. "Relax, everyone beginning in the mountains makes those mistakes" he said with a soft sense of humour. He allowed me more and more scope on my leash as my technique improved.

The traffic is intense; there can be 600 or 800 gliders in the air over the Alpes in the season, and as good as Flarm is, it won't see around the corner of a rock face. Vigilance must be constant.

Jacques has been described as the best of Roger Biaggi's disciples, and in fact better than the master. The philosophy they embraced is to develop the student's mountain technique while he learns a local area 'comfort zone'. As the student progresses, the technique is refined and the area of comfort is expanded, especially as local knowledge is vitally necessary.

Prudence requires a second or third option, but one must be an escape to a landable field at a glide ratio of no more than 20:1. The math seems easy enough, but it must be constantly calculated. Although 20:1 seems conservative to a fault, the sink can be as impressive as the lift when on the wrong side of a ridge.

Again, from the briefing document: *"Above all, if you come to the mountains from flatlands flying you should realise that the lift tends to be concentrated and directed by the mountains peaks and crests and that the valleys floors themselves are usually not a good thermal source. So effective cross country flights are best made by the more circuitous indirect path of following the mountain*

ridges around towards your objective rather than the straight or near-straight line between points more normal in flatland flying. Even when cumulus are seen passing over valleys, pilots should still understand that the ridges are the best areas for finding strong and reliable lift."

The third day showed the benefit of my previous flights as Jacques was sometimes silent for 20 minutes, allowing me to choose where to explore, and offering suggestions and critiques as required. I was elated at what I had learned. Each flight was preceded and followed by a briefing/debriefing which helped crystallise the lessons of the day. The teaching is very professional, but the atmosphere is unmistakably a club's.

Days begin with unpacking the hangar while the visiting gliders are assembled or untied, and the procession to the launch area begins. A pair of bells summons everyone to a mandatory briefing in both German and French, on the issues of the day and the expected weather. Imparting this information is shared between Jacques, (who shows off his remarkable memory by reciting every pilot's name), and Christian and MoMo. Christian, is a German Instructor who came to get his French Instructor's rating. He liked La Motte well enough to stay whilst MoMo, (Maurice, the French speaking club Instructor) has a been-everywhere-done-everything CV).



THE PRIDE OF LA MOTTE

After flying there is the usual cleaning and packing which precedes shared drinks on the club's deck. Many members stay in mobile homes in the club's camp ground, but other visitors lodge in rooms at the local Maison des Hôtes, a couple of kms from the club, where a small private room with shower and sink costs 26 Euros a night, breakfast included. Two and three star hotels are available in Sisteron about 20 kms away.

Friday night features a club BBQ, with everyone bringing their own choice of meat and doing their own-cooking. (This eliminates complaints about how it is cooked). A number of the club members welcomed me into their shared purchase of suitable meat, salad and cheese.

I was grateful for their collective patience with my French, but even though I was the only native English speaker there, English is the third 'official' language. I would have been welcomed warmly without any French, - at least before the wine made us all brothers.

The weather was excellent. They enjoy about 300 days of sunshine a year, but the club closes when the snow falls. Reservations are available through their web site, but the process is rather less formal than it seems on the internet.

The cost is very reasonable, with a 15 Euro/day club membership, and 25 - 30 Euro/hour for the glider and instructor, depending on the choice of glider. The

biggest economy is the winch launch which at 14 Euros, is a stunning bargain compared to the almost 6 Euro/minute for an aero tow at St. Auban. (Computed from when the tug is ready to hook up to your glider until the tug is ready to hook up to the next). I had previously paid more at St. Auban for my tows than the glider rental, instruction, accommodation and breakfasts/lunches.

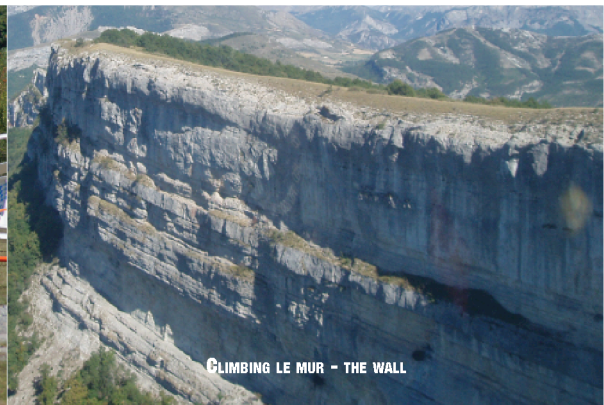
You can get to La Motte via Aix en Provence, which has an airport, or just a few hours by TGV train ride from Charles de Gaulle airport. I can recommend a rental car from Aix. There is however, a narrow gauge railway running nearby which looks like an adventure itself.

Provence is a very beautiful countryside. Nearby Sisteron, with its historic Citadel is worth a day trip. The club limits the gliders on site to a maximum of 25 so it is always personal and intimate. I had come to feel like a member in just a few days.

Will I go back? You bet'cha! And if you go, be sure to ask JR about the Nun and the punk on the bus.



LOCALS AND VISITORS AWAIT THEIR LAUNCH



CLIMBING LE MUR - THE WALL