

P&M Aviation[®]

▶▶▶ Winter 2017 / 2018 Newsletter

- ▶ Flying in Ireland
- ▶ A week to remember
- ▶ First trike flight





Main picture The latest PulsR to leave the P&M factory: the most advanced – and beautiful – example in the world

Inset Part of the QuikR fleet at Yarrowonga in Australia, about to start a day's work

Chairman's Chunterings

New year, new opportunities



Twenty-seventeen was certainly eventful and action packed for all of us at P&M. We had a good number of visitors from Germany, Italy, France, South Africa, Indonesia, Mexico, Australia, Belgium and, of course, from all over the UK and Ireland.

Our successes for the year included proving that the HypeR met its original design brief very well indeed. Its capability was also amply proved by three trips to France, the loan of the aircraft for competition use and also by introductory flights. It was very gratifying to have a QFI, with 4000h+, describe it as the "best-handling flexwing I have ever flown". So it is perhaps no surprise that the first two have been sold primarily for use as training machines.

We continue to build the Quik range of aircraft and one customer, on upgrading to a Quik GTR, said that flying the GTR had given him his flying mojo back! We are also extremely proud of the latest PulsR variant which was delivered in December – it was highly customised and featured

a simply stunning colour scheme, as you can see opposite.

We are in the process of finalising a number of upgrades for the Quantum range of aircraft, which will improve performance and handling as well as enabling such modified aircraft to match the lower end of the Quik types' speed range. There continues to be a high demand for spares as well as for wing and trike servicing, including for some older machines such as XLs, Blades and Quantums.

This year promises to be equally eventful, with ongoing innovations and some rather exciting aircraft developments being planned.

The team wishes you all a very Happy New Year, as well as safe and enjoyable flying in 2018.

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COVER PHOTO: The vast Biebrza national park in Poland, over 125,000ha of wetlands, as seen by Rob Keene in his QuikR during his flight of the Swans trip from Russia to the UK, accompanying paramotorist Sacha Dench. Their object was to follow the migration route of Bewick's swans. "I had special permission to overfly," adds Rob.

“Sorry, the west will have to wait”



A few years back long-distance flyer **Andy Oliver**, aka **the Journeyman Balladeer**, gave up microlighting in favour of paramotoring. Having concluded in 2017 that that was “a dead end”, he has returned to the flexwing fold, so we can expect to hear more of his exploits on www.thejourneymanballadeer.com. This flashback to Ireland in 2012 shows what we have to look forward to.

My trip to Ireland was a short tour of five days, only four of which were flyable, and would have been a very unsatisfactory affair (in that the flying objective of doing the entire west coast of Ireland was not even 1% achieved) had it not been for two supplementary factors.

Firstly, I was able to visit a very dear friend in Belfast. Secondly, I was met with warm hospitality in a style that goes above and beyond the norm. In Ireland you meet friends you did not know you had. And people who you thought were casual acquaintances – met at a previous fly-in perhaps – call you up, on hearing you are in-country, and invite you to visit.

The outline details are that 787 miles (1260km) were covered in 16h flying. Day 1 got me to Belfast. Day 2 was R&R. Day 3 onwards was allocated for the west coast, but the wind was gusting “heavy going” to “verging on stupid” so I hopped from field to field to an exit back to Wales at Wexford. Allowing for ground time, this works out at under 55mph (88km/h). While manageable on the ground, there was a constant and turbulent wind from the west as soon as one got to a 1000ft. The 105miles (170km) from Newtownards near Belfast to Abbeyschule took 2.5h, with speed against the headwind falling as one got further west. However, 13 flights were achieved and nine new fields bagged.

Hard work, but skills sharpened, technique honed, people met and stories to tell. It took four missions to get round Scotland, I fear Ireland will be the same!

Day 1: 294miles (475km) to Newtownards, via Caernarfon

One of those days when the weather forecast proved to be optimistic. The intention was to depart at 0900. On climbing up through the broken cumulus to 3000ft, the air to the north was solid cloud. I returned to the start.

Second attempt was at 1200, with the options of either going over the Bristol Channel and through the Brecon Beacons, or inland up the Welsh-English Border. Once airborne and with a clear view of the north Devon coast, but not south Wales some 20miles across the water, the inland option seemed much more attractive.



With no significant wind I flew past Bristol and the Severn Bridges and along the eastern edge of the thick skies over the Welsh hills. I eventually chose to turn west along the Usk valley and was able to maintain VFR across the low hills and out to the coast at Aberystwyth. Then it was a nice run up the coast to Caernarfon. Total flight time of 3h for the 180miles (290km).

Here in North Wales the cloudbase was pretty solid at 2300ft, but with small gaps that allowed strong, angled beams of light to plunge into the sea. Some well defined but very visible showers moved slowly at a lower level. Once airborne and about to coast out for the 80miles (128km) to Ireland, I could certainly pick out the Isle of Man and had a sense of Ireland away to the west,

Feeling safe and warm in my immersion suit, but not unaware of the empty expanse of sea I had to cross, I aimed for the western tip of the Isle of Man. An artificial comfort perhaps, for it extended the distance, but I was able to establish contact with Ronaldsway. In the silence of the Irish Sea there was at least someone who would hear me scream.

The degree of westerly in my heading, and the wind from the west, caused me to up trim for more speed than I usually do, and I was able to maintain some 60mph (95kph). No one else in the air, and no ships on the sea. The Mountains of Mourne, ▶

Facing page Open-cockpit flying!



“ It was one of those days when you have a plan, but you know you will have to adjust it. Constant assessment and re-evaluation is the key here

▶ occasionally bathed in shafts of sunlight, moved in the distance on my left, while the Isle of Man assumed greater definition on my right. The mouth of Strangford Lough increased in definition as the Calf of Man faded.

Losing Ronaldsway, I changed to Belfast. Nothing heard, but houses were now discernible on the coast. Then the relief of having solid ground under the wing. I flew up Strangford Lough, hearing several planes incoming from the south, and landed after 2h in the air, including 1.5h over water.

I am a big fan of Ulster Microlight Club in general, and instructor Gerry Snodden in particular. I know he was not worried about my being 15min behind schedule, but I appreciated his coming up to the field to let me stow the GT450 in the hangar for two nights. He had also called me earlier in the afternoon to voice concerns about visibility over the Irish Sea. I certainly used his view in my decision to do the final leg. Indeed, it was one of those days when you have a plan, but you know you will have to adjust it. Constant assessment and re-evaluation is the key here. So a tiring 300 miles (480km).

Not upset that the forecast for the next day was unfavourable. I was able to spend the weekend with friends of long standing (I had acted as their best man 31 years previously) without looking at the sky.



Further delay came from a procedural error on my part. My flying pattern from earlier trips into continental Europe had got it into my mind that a *General Aviation Report (GAR)** was only required when coming back into UK. Of course, it is also required to go from the mainland to Newtownards in Northern Ireland. North of England flyers will, of course, know this. I had called Caernarfon (on the north coast of Wales) to check the weather before departing and had mentioned that I intended to fly on to NI.

It came as a surprise (but on reflection not a surprising surprise) when the North Wales police

* On entering the UK a pilot can land at a designated airfield during operating hours, which deal with the light but important immigration formalities, or at an airfield that has been granted a Certificate of Agreement. In this second case the pilot must submit a completed GAR in advance. For touring purposes it means you need to get to a PC or fax machine 24 hours in advance of entering the UK. Details here: www.gov.uk/government/publications/general-aviation-operators-and-pilots-notification-of-flights

called my home field of Dunkeswell to say they had no GAR from me for Newtownards.

It is normal for an airfield to inform the local police of any known border crossings. Fair enough, and the Welsh officer was sympathetic and flexible, so I did an on-line submission to the URL in my touring notebook. But this, of course, was for my local county; it was not automatically passed on to the North Wales Constabulary, so when I presented the filing number at Caernarfon I looked a bit of a numpty – still no valid GAR. However, the sympathy and flexibility (and indeed patience) of the North Wales officer was maintained, and I filed into the right system just before departing.

Day 3: 119 miles (192km) Newtownards to Granard, via Abbeyschule

Early morning admin of packing and checking, paying fees and filing flight plans for the crossing



Photos, from left. Day 4: Rather neat hangar at Granard, Co Longford – finally remember to use my camera...; ready to depart Granard – after 15min I abandoned the track to the west coast and returned: 35mph at 1000ft; and approaching Dorran's Field. The windsock shows why one needs to be confident in crosswind landings when touring

to the Irish Republic meant that I left at 1150. Reasonable day, so courage high and heart aglow. This was bounced and shaken out of me after a slow crawl down to the border at Newry, and then heading south west for Abbeyschule – 2.5h at 40mph (65kph), in part due to the headwind and in part dodging rain.

No activity on arrival, but a welcome in the GA maintenance facility and an invitation to drop in at Limetree from Ian Brearton. Made a brew and had some lunch. Joined a pilot who was off to the petrol station. Looked at the sky, saw the scudding clouds, and decided that finding a comfy billet for the night was the priority. Arranged to stay at Granard, which had the double benefit of being close and downwind. The 13 miles, plus all the taxi, run-up, preflight etc, only used 25 engine minutes. There was a 30mph (48kph) tailwind immediately after take off. Fortunately, and I had checked, the runway was into wind. Funny how that happens.

Interesting approach due to the immediate hill, which really does lead to a slow approach with strong uplift. Made very welcome and offered an old caravan for the night. Broke out the Chateau Musar 2001 and one of my best tinned French meals. Very useful to have the light and space to review all options for the morrow.

Howling winds forecast along the west coast for days, but decide to feel my way west, with a ▶



“ I was mortified to see two tie downs draped across the rear axle. Milltown Pass may one day get a terminal, but that day nearly saw a terminal event...



Photos, from left. Day 4: Trim – very pleased to get here and rest. Owned by farmer Pat Murphy, who is also Aer Lingus A321 pilot. Now that's portfolio working!
Day 5: Midland Micro Centre, deserted – the owner had not fully recovered from a recent accident; and ILAS Field, deserted but open. Filed a flight plan and sat in the sun. I always try to unwind before a sea crossing

▶ reserve plan of bagging fields and heading home via an overnight at Limetree.

Day 4: 97 miles (156km) Granard to Limetree, via two strips

Ever the optimist, I was away at 0830, and heading for the Atlantic. By 0835, at 1000ft, I was surprised to be not far beyond the Granard perimeter fence. The GPS advised that I was peddling into a headwind in excess of 40mph, which had not been evident on the ground. Clearly it would be worse at the coast, which would take not 1h 15min but some 3h to reach. I swung back to Granard to add details to Plan B.

My host pointed out a friend's field at Dorrans, only 18 miles off and with the wind up the chuff. Arriving shortly before I took off, I was treated to beverage and biscuits by the owner (my apologies for not writing his name in my diary) and saw his Dragonfly in the hanger. No way he would be flying this week.

Consulting my latest iPhone app (Kevin Glynn's *VFR Flight Guide Ireland*), I identified two fields to the east, and notionally easier weather.

Ah! Milltown Pass – was there ever a field that promised so much and delivered so little? Boggled in twice, and worked up a sweat twice as I hauled the 250kg GT450 to firm ground. Tied it down in

as sheltered, and firm, a spot as possible and stood watching the rain clouds beat past.

It was the rain that saved me from damage and worse. I was lined up to go when another shower arrived. Switched off and stood under the wing, I was at first surprised, and then mortified, to see two tie downs draped across the rear axle. Not offering an excuse, but my preflight sequence had become rather disjointed. Milltown Pass may, one day, get a terminal, but that day nearly saw a terminal event.

Learn and Live, and onwards, north east to Trim in Co Meath. Lovely field – easy to find, wide runway, firm ground, nice clubhouse, fuel available and an interesting host. Pat Murphy, farmer, listened respectfully to my yarns and *soi disant* heroics before revealing that farming was his family business – he was actually an A321 pilot with Aer Lingus.

After a 4h visit, which included 40 unplanned winks, I sallied forth for Limehouse (near Portlaoise) in more stable air, evening sun and

manageable rain showers. The reception at Limehouse was equally pleasant. Drank some beer, did some maintenance, filed my GAR for the return the next day and had a long sleep.

Day 5: 277 miles (445km) Limehouse to Dunkeswell, via four fields

Waking early, I did a quick dawn patrol to enjoy the noticeably cooler morning and to check out the work done the previous evening. The plan was to make best use of the day: cross the Irish Sea by midday, bag a few fields and get into Dunkeswell with a good few hours of daylight in hand.

Things went well from the start, with a easily handled but helpful wind that started on my starboard quarter and then settled out of the west to give a tailwind of 25mph (40kph) over the water. Quick stops, unannounced I'm afraid, at Midland Micro Centre, Rathvilly and Hackettstown. No harm done, since all were deserted.

Into the more established and sheltered ILAS

(Irish Light Aircraft Society) Field, at Wellington Bridge near Waterford, this time with permission previously requested. Did my pre-water meditation and unwind, donned the figure-hugging immersion suit and then launched into the big blue yonder.

Wonderful flight at 6000ft with good comms with the ATC right from the taxi, and my transponder signal standing out big and bold on their screen. All this makes for a more reassured frame of mind, this time enhanced by doing the 60 miles (of which 50 were over water) to Haverfordwest within the hour. Wales appeared, marked by clouds, just as Ireland faded. Formalities completed, tanks topped, it was a thing of joy to do the 113 miles (181km) to the Home of the Brave in 90min.

So a great finish to offset the two previous days of making the best of it: 787 miles (1266km) in four flying days, nine new fields logged and some £240 spent on fuel plus three landing fees. Ignoring depreciation and ownership costs that's £75 per day of liberating entertainment. Can't do that in a Cessna! *Faugh a Ballagh*.*

* *Faugh a Ballagh* is Irish for "fear naught". It is the motto of the Royal Irish Rangers. The friend I went to visit was a former Commanding Officer of one of the Royal Irish battalions. "Fear naught" is the motto of my own regiment, the Royal Tank Regiment – by these things are we connected.



Flying the GT450 is an exhilarating experience. The views around the coast and countryside are magnificent in an "open top" viewing chair. However, each time I fly, it crosses my mind: what is going on in the wing above me and the trike that is keeping me in the air? I helped my father strip and rebuild our aircraft but never really appreciated the design and mechanical engineering that went into one of these machines. That was until I had an opportunity to undertake a week of work experience at P&M in October.

It was "real" work experience, clocking in at 8:30am and signing off at 5pm. I had pre-determined ideas about what working in a factory must be like, mundane, repetitive jobs that surely after a while must get boring... not so at P&M. The team are all aviation enthusiasts and to them, their job is also their hobby and passion!

My first assignment within 15 minutes of arriving at P&M was to assist Sam Carroll in the wing assembly and repair section, which is run by the highly experienced Robin Kraike. Sam, my mentor for the week if you like, was also knowledgeable and an excellent guy to work with. Both Robin and Sam instructed me on how to assemble and dismantle the wings of the aircraft according to the different designs of the wings.

Once we had fully assembled a wing and it had passed a full inspection by another qualified person, the process began again, except this time dismantling it into a bag, and then on to the next wing to see what needed to be done. Once they were confident I knew what I was doing, they allowed me to get stuck in and hands-on under their careful supervision.

The team are extremely professional and fastidious in their work. No room for short cuts or human error here. They know that pilots out there are reliant upon them to do the job correctly: most of them fly themselves and all new wings and the vast majority of rebuilt ones are flight tested by either Robin or Dr Bill Brooks before they leave the factory.

But when 5 o'clock strikes, rather than race for the door, one of the guys, Ian Nash, went to his boot and brought out his own large homebuilt model helicopter to play with...

This was fascinating to say the least. It had an underslung load capability, a full set of navigation lights and a fully retractable undercarriage, as well as a winchman that could be lowered and raised in flight— you can just see it in the picture. At distance you would be hard pushed to distinguish the model from the real thing – even though it was electric powered, it sounded like a full-size machine with a great turbine whine and very realistic main rotor blade noise.

I had a great week at P&M, they treated me as part of their team. I learned a lot about the aircraft and have a much wider insight into their design and construction. My final impression of P&M is that it is rather like a giant toy Airfix factory, where big kids get to build and play with their toys and – best of all – they get paid for it!

Many thanks to the P&M team and special thanks to Andrew Cranfield for inviting me, and also to Sam my mentor. ■

Facing page The author hard at work
This page, from top Building a wing; almost like the real thing – flying a model helicopter with other P&M staff; and inside the factory



A week to remember

Few people of school age get to build aircraft, but then few people spend their work experience at P&M. Over to **Jed Fisher...**



First trike flight – how to!

American instructor **Gary Berdeaux** has lost count of the number of folk he's introduced to flexwing flying. Here's how he approaches that all-important first flight

Taking a friend up? Most pilots love to take friends or family members flying. Once you experience trike flight, you are hooked. Big time! So much so, you want to get others hooked on the same drug. *Great!*

Getting more people exposed to the joy of trike flying will only generate more pilots. There are relatively few trike pilots in the US compared to traditional fixed-wingers. Flexwings are much more popular in Europe than here in the States, even though they were invented here! If we want to see more trike pilots, we've got to get more people up in a trike for a positive flight experience.

I take many, many people up for their first-ever trike flight, along Alabama's beautiful coastline. I fly year-round, seven days a week. That's a lot of intro flights. So I'd like to share with you what

I've learned, so you can offer a safe and enjoyable experience to others.

PIC – your responsibility

First and foremost remember that *you* are the Pilot In Command. As such, *you* are responsible for the safety of your passenger, and for the safety of those on the ground. There is no greater responsibility one can have. Being responsible requires great care in preparing your aircraft for flight, preparing yourself to fly, and preparing your passenger, so that they know what to expect during the flight. You are also responsible to the loved ones in your life, to come home safely after every flight.

Yea, I know, a pretty heavy list of responsibility isn't it?

Aircraft maintenance

A well-maintained aircraft is critical to the mission. How many hours flight time since the last annual condition inspection? We all take extra care to inspect, clean and repair our aircraft for a condition inspection. The longer it has been since the last inspection, the more likely it is that something may need mechanical attention.

I suggest reviewing your aircraft maintenance manual as a guide for a very thorough preflight inspection. At the very least you should have a printed preflight checklist. *Use it!* Completed successfully, a thorough preflight will give you peace of mind while flying with your guest.

Aero-medical – currency

Now that you have your aircraft in tip-top shape, look in the mirror. How are you feeling? Are you up to the task physically and mentally? Are you stressed at home or work? Are you able to focus on your flight? Have you gotten sufficient sleep? How current are you? When was the last time you practised an engine-out emergency landing? How many full-stop takeoffs and landings have you done in the last 30 days? If you're getting rusty, go take a flight to brush up your skills.

Weather

Whether or not conditions are good to fly is a critical question. It should not just be flyable, the forecast should be *great!*

Nobody will thank you for taking them flying on a marginal day. Just because the sky is blue, does not mean it will be a smooth flight. Some of the rowdiest days I've experienced have been due to strong blue-sky turbulence.

I suggest taking a short flight around the pattern to check conditions prior to taking your passenger up. That's the only real way you will know what to expect; it will also enable you to tell your passenger what to expect.

In general late afternoon flights within three hours of sunset are best. Early mornings are also very good. Just keep in mind that with morning flights, the later you fly into the heat of the day, the stronger the winds and thermals will be when returning to land. Where I live, the wind and thermals usually turn on by around 9am, so if you want a smooth flight you need to start pretty early to avoid a rowdy ending.



Because weather can change so quickly, I don't recommend taking a first-timer on a cross-country flight. Short flights in predictable stable weather are best for a first trike flight. Also, great conditions mean that you too will be able to enjoy the flight.

Passenger briefing

After completing a thorough preflight, checking weather conditions and assessing your fitness to fly, you're now ready to brief your passenger on what to expect and how to prepare.

Any passenger must be old enough to fit the seat restraints and be able to communicate verbally (unless you have made arrangements to take up a person with a disability). Assuming there are no complications in these areas, I then work through the my passenger briefing checklist, shown here.

I use this list with everyone I take flying for the first time. I believe a comprehensive checklist is vitally important in all aspects of flight, not least with passenger briefings!

A first-timer is experiencing a host of emotions prior to going up with you – excitement, fear of the unknown and safety concerns, both as regards the aircraft and your judgement and ability. Working through your checklist together and discussing the flight ahead will give you and your passenger time to prepare mentally for the shared experience ahead.

Let's go through the passenger preflight checklist together as I elaborate on each item on the list. You can find the list overleaf.

First, I read the contents of the FAA Passenger ▶

Facing page There's nothing quite like it!
Above Two more trike pilots in the making?



▶ Warning sticker that all LSA aircraft carry in the US. Of course this may not apply where you are, but I reckon it's always worth explaining the legal status of what you are flying.

Then ask your passenger to empty their pockets, and to remove earrings and any other loose or bulky jewellery. No cameras, or mobiles either, as these items will go through your prop should they drop them during flight. I also ask that they not have anything in their mouth – gum, chewing tobacco etc. Not good for your prop or microphone foam covering!

I always spray the mic cover and headset with disinfectant prior to the flight so that the passenger has clean sanitary gear. Nobody wants to get a cold from your last passenger. I also provide them with a freshly laundered do-rag (head cover) to keep my helmet clean.

After you complete the checklist with your passenger, ask if they have any questions. Suggest that they take a last restroom break and a drink of water prior to flight, so they are comfortable and properly hydrated.

Seating your passenger

After the preflight briefing, it's time to demonstrate how to board your aircraft.

Show your passenger where to step to avoid damage to the trike, then show them any aircraft controls that they need to avoid – hand throttle, rear foot throttle (if equipped), mag switches, BRS handle etc.

Strap them in and adjust seat belt and shoulder restraints. Fit the headset and helmet and test the com system. I discuss hand signals that can be used during the flight in the event of com failure: I tell my passenger to tap me on the shoulder and point to the ground if they want to land.

Show your passenger how to adjust volume and VOX clipping/noise reduction, if equipped. Remind your passenger to pause conversation to listen to pilot radio transmissions. I also ask my passengers to point out any other aircraft they may see during our flight, so that I can avoid and communicate our position over the radio. ▶

Photos, from top Adjusting visor and earphones; when setting up the mic, brief the passenger on hand signals for use if the intercom fails; be sure onlookers know when to clear out of the way; and all systems go!

PASSENGER PRE-FLIGHT BRIEFING

Read the contents of the FAA Light Sport Warning aloud to your guest (FAA requirement)

PASSENGER WARNING

THIS IS A SPECIAL (OR EXPERIMENTAL) LIGHT SPORT AIRCRAFT AND DOES NOT COMPLY WITH THE FEDERAL SAFETY REGULATIONS FOR "STANDARD AIRCRAFT"

Do not touch flight controls or other aircraft controls, including hand throttle, choke, ignition switches (mags), BRS handle, wing trim switch or fuel shut-off valve. Point out these items so your passenger knows what to avoid touching.

Keep your feet very light on rear seat footrests as they are attached to the aircraft nosewheel for ground steering. Ask passenger to move feet back off foot pedals during takeoff and landing to avoid unwanted steering input.

Rest hands on thighs, or fold arms across stomach or chest. Hold onto seat back or rest hands on pilot's shoulders.

Describe takeoff and landing, as trikes take off and climb out quickly.

PROP SAFETY DISCUSSION

Anything that comes out of the cockpit will damage the propeller! No loose scarves, jacket hoods or other clothing articles. Tie up long hair and tuck into shirt or jacket. Empty pockets – no loose objects in cockpit. No cell phones or cameras – prop danger discussion. Do not reach behind and touch the hot engine or spinning propeller!

Remove earrings (can damage headset earcups) and any loose jewellery.

Demonstrate cockpit entry to avoid damage to your trike. Have passenger scoot butt all the way back into the seat.

Fit your passenger's seat and shoulder restraints. You need to do the fitting and adjustment.

Fit and test headset/intercom. Adjust volume and noise-cancelling level for flight. Hand signal to show pilot if headset fails. Hand signal for passenger to request return for landing in the event of com failure.

Fit helmet, secure chinstrap, lock faceshield for safety. Do NOT remove helmet/headset until aircraft is parked and engine off.

Explain radio procedure. Ask for help visually scanning for other aircraft. Listen for other aircraft on radio.

AIRSICK PROCEDURE Raise windvisor (let the passenger open, close and lock and unlock their visor before takeoff), vomit to the right side to avoid the mic boom (not on the pilot, please). Prompt passenger to let you know immediately if they begin to feel airsick. Return right away if airsick.

Prior to takeoff recite verbal checklist:

- Cockpit secure (no loose items, compartments properly secured)
- Seatbelt and shoulder restraints secure
- Helmet/visor secure and locked
- Intercom functioning properly
- Feet off footrest during takeoff and landing

Remind passenger to keep seatbelts secure and helmet and headset on until the aircraft is parked and the engine is turned off. Suggest that they let you help them remove gear to avoid damage to your equipment.

***NO SHOWING OFF. GIVE YOUR GUEST A NICE GENTLE FLIGHT.
The only thing that should be breathtaking is the sights!***



▶ Start up

Often when taking up a friend for a flight they have friends and family crowding around to watch. Be sure to brief onlookers so that they know to stand back and give clearance for engine start-up and taxiing. Be especially cautious if pets and small children are in the area – a spinning propeller is invisible.

Remind your passenger that their footrests are connected to the pilot steering. Ask them not to put any pressure on their footrests. I further ask that during takeoff and landing they pull their feet back and not touch their footrest until we are in the air or back safely on the ground.

In flight

Be careful not to let your passenger distract you from your pre-takeoff checklist. I always read through my list with the passenger listening, so they know I'm busy fulfilling my pilot responsibilities. Part of my pre-takeoff list includes asking my passenger to confirm that their seatbelt and shoulder restraints are safely attached and adjusted, their headset is comfortable and functioning properly, and their chinstrap is secured with the face shield down and locked.

Tell your passenger that initially you will be pretty busy flying the aircraft, listening and

watching for traffic, until safely clear of the traffic pattern. Ask your passenger not to chat until you have cleared the airspace.

Remember to let your passenger know that you are willing to curtail the flight and land at any time, should they begin to feel airsick or experience too much anxiety or discomfort. Remember, their comfort and safety is your primary concern.

Fly with care and respect. Nobody likes getting scared during a flight. I never perform steep turns, dives, stalls etc. I fly each passenger as if I were taking up my grandmother! You will gain their trust and respect if you give them a safe and enjoyable experience.

Be sure to go through your pre-landing checklist verbally so that your passenger knows that you are busy preparing to land safely. Remind them to move their feet off their footrest until you are on the ground and slowed to taxi speed. Remind them to keep all their gear on until the engine is turned off.

Remember, *you* are an ambassador for the sport. You only get one shot at providing a fantastic first trike flight for your passenger. If done properly, you will give them an unforgettable experience that may one day result in the creation of a new trike pilot. So, please do it right! If you are haphazard in preparation or fly like side-show bob, you will never see them in the sky again! ■

- Gary Berdeaux can be reached via gary@beachflight.com

Above Sunshine, fresh air, fantastic views, what's not to like?

Un voyage HypeR vite!

Have aircraft, will travel.
P&M boss **Andrew Cranfield** takes
in some French hospitality



From top Le Touquet, complete with bomb craters; and the spick and span but virtually deserted aerodrome at Troyes, with the useless restaurant directly behind Bill

It was the idea of our French dealer, Alain Hanse, to attend a French flexwing-only event at Pizay near Lyon, in June 2017. Given that this was in the heart of Beaujolais country, and the fact that both Bill Brooks and I love France, it didn't seem a bad idea to pootle across the Channel in the HypeR and show it off to all and sundry.

Thanks to superb organisation by Alain, it turned out to be a fantastic long weekend. Bill was my chauffeur, although he refused to wear a peaked cap, goggles and gauntlets, which was a little disappointing. My role was to offer the chauffeur loads of advice, tell him when I was hungry (both of which he normally ignored), refuel the aircraft and do some of the flying.

We had planned to leave Manton at 0730hrs but by the time we had sorted ourselves out, packed everything in to the HypeR and done our checks etc, it was about 0750 before we lifted off from the factory airstrip and headed south east to the coast. The first problem was that my camera decided to malfunction as soon as we started our take-off roll, which was pretty annoying, but there was nothing I could do about it. It was delightful to fly over Wiltshire, Hampshire, Surrey and Sussex in the sunshine as we headed to just east of Eastbourne for our Channel crossing to Le Touquet.

This was pretty exciting for me, as I had never crossed the Channel in a microlight before and I am not fantastically fond of flying over cold expanses of water. As has been pointed out by someone far wiser than us, the engine doesn't know it is over water, so what is the problem? We had worked out our routine in case of a ditching, but the two things that I kept thinking were, when was the optimum time to unplug the intercom lead and lose comms? And, was my chauffeur going to follow correct procedure and let me disembark first?



▶ Anyway, after final checks which included the locator beacon and lifejackets, we climbed to 5000ft before coasting out. We had a grandstand view of how busy the Channel was with shipping. Looking down, I remembered a Royal Navy friend telling me that in his frigate he was always chasing ships that were merrily sailing on the “wrong side of the road” to sort them out. However, I couldn’t see any evidence of such behaviour on the way across.

The actual crossing happened without incident but it was decidedly chilly at that altitude, so I was pleased when the brilliant white sandy beaches of France came into sight. Having been up since 5am and not having had anything to eat, I was busy fantasising about the wonderful coffee and delicious fresh croissants that we were going to feast on at Le Touquet. The interesting thing about the airport is that the largish “lakes” beside it are, apparently, bomb craters from the last war.

Having confirmed with the tower at least three times that we didn’t have a transponder fitted, we were cleared to land. During finals, we were slightly surprised to see three Chipmunks on the pan, in Danish military markings. They were, apparently, heading to a Chipmunk fly-in somewhere in Belgium.

We touched down, taxied in, switched off and leapt out after 2h 5min, eager for our brekkie. With my passport clutched in my hot little hand, we strode expectantly to the terminal.

What a disappointment! Nothing to eat to drink and the polite staff barely interested in us and not bothered about checking our documents. After a quick pee break, we refuelled, took off and headed to Troyes, with a small headwind component and now slightly hungry. Fortunately, we were distracted by the beautiful countryside and concentrating on ensuring that we avoided military control zones.

French countryside is very different from the UK landscape and it took me more than a few days to work out why. I think it is the lack of hedges compared to southern Britain. I might be wrong, but that is the only thing that I can think of.

Shortly after take-off, we very quickly noticed WWI military cemeteries. For me, the most poignant were the small plots in corners of fields with 30-50 or so headstones in each. Rather poignant and moving.

We then flew directly over the Thiepval Memorial at Authuille which commemorates the 72,246 British and South African soldiers who were never found during the fighting in the Somme. The Flying for Freedom video on YouTube of their visit, a few days later, is worth watching.

As we tootled along in great comfort at 2500ft, enjoying the landscape as it rolled out beneath us, we suddenly saw a hawk or buzzard at exactly the same altitude to us, passing by on our port side on a reciprocal heading, not more than 30ft away. It gave us a glance with a disgusted look on its face, as if the say “Zut alors! What are you doing? This eez my airspace, Engleeshmen” or something similar.

However, flying over all the vineyards in the warm sunshine was a simply wonderful experience. It was interesting to note that all the vans used by the vineyard workers were white – I can’t think why that should be, but it seemed to be the case in every vineyard we flew over.

This was a long leg of 2h 37min and my tummy was beginning to seriously rumble by the time we arrived at Troyes just after midday. So, I was delighted to see that there was a restaurant at the airport. Having booked in with the helpful pompier/receptionist, we rushed into the restaurant where two young men were laying out tables with exquisite care. Having requested a menu, we received a Gallic shrug and an explanation that, in fact, there was no food in the place! It was almost like something out of *Monty Python*.

I can only assume that it was some sort of government job creation scheme, designed to trick hungry visiting Brits.

We only had enough change to buy one pack of crisps and one packet of biscuits from the nearly empty vending machine in the foyer, so that had to do. My visions of a weekend of French gastronomic delights were beginning to fade rapidly. Bill, of course, was much more sanguine – he had found a small sandwich which he had secreted in the aircraft some months before, so he was happy to chomp into that.

Having refuelled and been waved off by the delightful pompier, we departed for Pizay.

En route, we amused ourselves by chasing a TGV or two but never managed to catch one. As is always the way, as you get closer to a new destination, you get a little worried that you



From top Beautiful countryside but not a very good area for outlandings, we decided; the fuel injection system made by LAD in Normandy; and the barbecue under way, with Samir’s two children getting stuck in, shortly before being trampled underfoot by a hungry me

From top The Friday barbecue – living the dream!; Saturday pre luncheon drinks – the French certainly do food with style and panache. Fabulous!; and the gentle and arcane of art of propeller manufacturing being explained by the DUC managing director



From top The HypeR going native at Pizay, which drew some positive comments, with some of our luggage on the right; and Samir Elari, in the flowery shorts and wacky glasses, explaining the Sunday navigation exercise, with Bill, next to him, pretending to understand...

▶ cannot actually see it and that your navigation could be a bit iffy. However, at the last moment it always seems to pop into view, and Pizay was no exception.

Aerodrome de Pizay is a very pretty little airfield with a superb clubhouse. It was founded and is run by the efficient Samir Elari, who not only has a wacky taste in specs and clothes, but also has over 10,000h on practically everything that flies, including hang gliders, hot-air balloons, paragliders, microlights, gyroplanes and light aircraft. He has also won a number of microlight championships over the years, so he knows his stuff and was kind enough to host the event.

As we touched down and taxied in, we spotted the ever reliable and efficient Alain frantically waving to us, which was a great relief. Having parked and shut down, we were instantly surrounded by smiling faces as introductions were made. People seemed to be quite impressed by the fact that (a) we had crossed the Channel and (b) that it had only taken us 6h 46min flying time from Manton to Pizay. I later discovered that most French and Belgian pilots would not consider flying across the Channel, even though they were keen to fly in the UK. One got the impression that, for most of them, it was considered too risky.

After a short rest, we removed all our personal kit and refuelled the aircraft. Bill then carried out a number of short demo flights which people seemed to enjoy. While he was doing that, I had a quick look round the hangar and the various aircraft. The first thing we noticed was a rather neat French aftermarket fuel-injection system for the venerable Rotax. We didn't see this engine in action over the weekend and fitting it to a new engine would invalidate any warranties, so it doesn't have much potential for us in the UK but nevertheless it was very interesting installation.

Apart from all the Air Création machines, there was an SSDR aircraft with an Ellipse wing and a superbly engineered Swissauto single-cylinder, fuel-injected, four-stroke engine.

We also spotted a Quantum trike sporting an Air Création Bionix wing. The owner was a really nice guy who used it for competitions. We think he was impressed by his quick flight in the HypeR.

There was also a neat GT450 owned by a character called Jacques, who had trailered it down from Belgium. Apart from the HypeR, these were

the only British machines, out of all the 26 or so flexwings at the airfield.

There was a lot of activity as people flew in and others pottered about for some local flying in the ideal conditions. The standard of flying can only be described as variable and very French. Everyone was very relaxed and incredibly welcoming. The event was impeccably organised by Jéro Hajewski of the Air Delta forum and, being seriously hungry by this stage, I was delighted to see that there was a barbecue being started. Things were beginning to look up!

After folding the wings of the HypeR, which drew some admiring glances, and putting it to bed in the hangar, we were ready to party.

It rapidly became apparent that this event took food and hospitality very seriously indeed. Prior to the barbecue, there were pre-dinner drinks and some nibbles and aperitifs in the form of local cheeses, courtesy of a local pilot, who explained that one of the cheeses contained wood ash. It tasted great to me, but by that point I would have chewed a plank of wood for some sustenance.

The barbecue itself was held under the warm evening sky in a star-shaped marquee. Given the combination of good company, wine and food, we really started to chill out and relax. It was great to savour the sense of achievement in flying 540 miles, pretty well to plan, in one day.

Feeling rather tired by 10pm, we were taken to the local hotel that Alain had arranged for us and crashed out for the night, to sweet dreams of flying over the wonderful French landscape.

Saturday dawned slightly overcast but we did manage a few flights before the rain started. At that point, the decision was made to visit the propeller manufacturer DUC, which was based in the locality, as it was clear that flying was out for the afternoon. However, lunch obviously had to come first and started with pre-luncheon drinks and canapes in the main hangar

Having enjoyed lunch, we all piled into cars to drive to the brand spanking new DUC factory at Aérodrome de Villefranche-Tarare. This make would appear to be the most common fit on the French trikes we saw, particularly its Windspoon design (very similar in outline to a Lynx helicopter main rotor blade).

During the guided tour, the amazing level of investment was apparent everywhere. Bill and I



From top The very lovely Roanne Mably airfield from the south; and Chateau Chantonnay – typical of the type of property we had to find, and not a cow shed

“ I discovered that most French and Belgian pilots would not consider flying across the Channel. Most think it too risky... ▶



From top Everyone at Mably – you can just see the smoke from the barbecue by the clubhouse; Bill performing the traditional 5am dance of the sweaty socks at St Omer on the Monday morning; and the HypeR and the FFF fleet outside the former Luftwaffe Bf109 hangar at dawn

▶ were green with envy, not only at the fabulous new building, but also the significant investment in systems and machinery. As far as we could make out, the company does a lot of collaborative EU research programmes with universities, which may explain how the facility had been partially funded.

After the tour, we returned to our hotel for the Air Delta official evening meal of *lapin* (rabbit) and festivities. After the meal, there were a number of prizes handed out and then a sort of "secret Santa" took place. Everyone (apart from the two British numpties who had no idea that this was going to happen) had arrived with some gifts and these were exchanged between everyone. We will certainly know better next time and bring some gifts. It was an excellent evening.

Sunday started as a lovely sunny day and we quickly rigged the HypeR and did more demo flights, which seemed to be appreciated. After some debate, we decided to stay and join in the aerial treasure hunt (which consisted of mostly identifying local *chateaux*) ending up at the Roanne Mably aerodrome. From there, Bill and I decided we would head up to St Omer and visit the Flying For Freedom team (who were doing a WWI battlefield tour) before crossing the Channel.

This was the night after the London Bridge attack and several pilots turned up on Sunday wearing T-shirts with London or British-type motifs, quietly expressing their sympathy for us. We found that very touching. I think, and pray, that these awful events will bind us more to Europe, despite the current politics.

We were the last to depart on the navigation exercise, but we reckoned that with our speed advantage, we would catch up the rest of the fleet fairly quickly. Most of the 12 landmarks we had to find in the 100 mile course were simply stunning *chateaux*! As luck would have it, the only aircraft we saw, and then overtook at high speed while waving frantically, was the Quantum.

As the navigator, I was rather pleased with myself at finding all the necessary waypoints. That was until Bill decided, for some reason, that a random derelict cowshed was one of our waypoints. Despite my pleas, we circled the shed three or four times before he finally conceded that perhaps it wasn't what we were looking for.

Having found all 12 waypoints, we then had to find the Roanne Mably airstrip, which was right

beside the river Loire. A canal runs alongside the Loire and finals for 34 is down this canal. You go lower and lower between the tree-lined canal banks until, at the last moment, you veer slightly left to cross the threshold – a fantastically scenic approach.

We were one of the last three to land and, having handed in our sheet, got busy finalising our route north and shovelling down some food. We refuelled, said our thanks for a wonderful weekend, and very reluctantly departed. Sadly, that meant we couldn't hang around for the prizegiving, as I am pretty certain, as I kept reminding Bill on the way home, that we probably won due to my brilliance as a navigator.

As we lifted off, everyone lined up and waved us off – a really nice touch and a perfect ending to a brilliant time with the Air Delta group. There is video of our departure from Mably on the P&M aviation website.

Steaming up the Loire valley, a crane slowly flapped its way across our bows about 200ft ahead at the same 2000ft altitude, a wonderful sight. Although we had a slight (inevitable) headwind, the sun shone as we initially crossed over loads of pretty little vineyards and then flew over a slightly more forbidding huge forested national park.

After 158 miles we arrived at Troyes, which was even more deserted than normal. A quick refuel and then off again.

I must confess that the leg to St Omer felt long, as we were both a bit tired by this stage. We did fly over the underground V2 rocket factory at La Couple, Wizernes, just 2km south of St Omer. Even from the air, it looked impressive and slightly sinister. It is now a museum and Bill, having visited it, reckons it is well worth seeing.

St Omer has a very historic place in aviation history, as it was the headquarters of the RFC during WWI. It could actually be described as the spiritual home of the RFC. The Flying For Freedom team were brilliant, helping to put the HypeR in the rather crowded hangar and then very generously feeding us as well.

The evening was spent quaffing beer and telling wild tales of the early days of hang gliding and microlighting, before Bill and I ending up sleeping on the floor of the clubhouse bar in our flying suits. I haven't slept in a bar for a while but it was surprisingly comfortable.

We helped fuel the FFF aircraft as well as the HypeR and then, after a full FFF English breakfast, got airborne as quickly as possible as the weather across the Channel didn't look fantastic. The crossing was cold but as we coasted in over Hyde, the weather deteriorated further and things got rather wet and lumpy in rain and gales for the rest of the journey home.

It was the longest leg of the trip and we just squeaked into Manton very tired and somewhat wet, as the last 45min or so were really unpleasant. To avoid low cloud and squalls, we diverted up the A34 from Popham to clear high ground, then got to Hungerford and back home by grovelling up the Ramsbury valley in rain and turbulence.

All the time, we were on the lookout for suitable landing sites should the weather have really closed in. It was doubtful if we could have got much further, as the conditions were deteriorating all the time and we were running low on fuel because I had not brimmed the tank – a salutary lesson.

Even in the appalling conditions of the last leg, the HypeR performed faultlessly and both Bill and I felt that it certainly met, if not exceeded, all the design specifications with regard to performance and comfort. The whole trip was a wonderful experience and very much *formidable* and *tres joli*.

Our grateful thanks go to Jéro of Air Delta, Samir and Alain for all their organisation and support. We would certainly recommend visiting both Pizay and Mably, as their welcome and hospitality could not be faulted.

We certainly intend to return in 2018. ■

The statistics... from four days of pretty intensive flying

Leg	Distance (miles)	Time (h:min, h dec.)	Average speed (mph, km/h)	Fuel burn (litres)
Maitton-Letoucliet	174	2:5, 2.08	83.00, 133.58	33.00
le Tlouquet-Troyes	204	2:37, 2.62	78.00, 125.53	46.00
Troyes-Pizay	162	2:4, 2.07	78.00, 125.53	
Pizay (local flights)	11	0:9, 0.15	70.00, 112.65	
Pizay (local flights)	15	0:12, 0.20	73.00, 117.48	40.00
Pizay-Roanne Mably	100	1:18, 1.30	77.00, 123.92	
Roanne Mably-Troyes	158	2:0, 2.00	78.00, 125.53	28.00
Troyes-St Omer	192	2:36, 2.60	73.00, 117.48	
Stomer-Manton	194	2:40, 2.67	72.00, 115.87	25.00
Totals	1210	§v15.68	75.78, 121.95	172.00

Two-up with luggage (472.5kg) including 65 litres of fuel, gave a range of 307.99 miles

Close formation in South Africa



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