

RAF Lyneham Flying Club European Flying Expedition

By

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RAF Lyneham Flying Club completed an epic 3000 mile journey around Europe and Northern Africa with four light aircraft and eight people.

Once the idea was confirmed and the intentions fixed, I set about trying to get people interested in coming along. I wanted a good mix of experience levels among the team and ended up with four people who were primary pilots in terms of their experience, ratings and currency, with four others of varying experience. In addition to myself, the team consisted of Flt Lt Martin Baber, a C130J pilot, Sgt Bryan Coe, a 47 Sqn loadmaster, Sgt Dave Jelly of 47 Air Despatch Sqn and SAC Steve Lane, a propulsion mechanic. Other club members Mr Philip Threlfall, Mr Daniel Seagrave and Mr Craig Evans completed the team.

Jobs were allocated to all members and a great amount of research carried out. Responsibilities allocated were finance, en route airfield and fuel availability, accommodation and food, foreign AIP procedures and customs with everyone reporting on their findings during regular weekly meetings in the lead up to the expedition.

During the meetings, we also conducted training so that everyone was adequately prepared for most of the eventualities that we may have come across. Once again team members researched and gave talks on subjects such as ditching, dinghy drills and sea survival, crew resource management and aircraft performance. The aircraft performance was particularly important given that we would be operating close to the max all-up weights in temperatures around 35C at 3000ft. Not too much of a challenge for most modern aircraft but a bit of a handful for the ones we had on a short runway. Lyneham club already had two PA28 Warriors but needed four. Talks with other clubs eventually resulted in us borrowing a 180 Archer from RAF Benson and a further Warrior 151 from RAF Waddington.

I decided early on that I wanted to have all Piper Warriors for the expedition for a number of reasons. All of our club pilots were very current on this type, I was experienced with the engineering side of the aircraft, and it allowed a smaller number of spare parts to be taken, as they would be suitable for all aircraft.

The day before the departure date was a bit hectic, BBC West had offered to come along and do some aerial footage of us flying in formation prior to departure and I have to admit that it was with some relief when they called to cancel as they were busy with covering the London bombings and a murder in Wootton Bassett.

However Radio Lyneham, who were given updates by Eng Ops, broadcast progress of the expedition to the local populous.

Day One

An early start saw six of the team meeting up at the club at 7.30am. The other crew were to meet up with us at our planned night stop due to a summer ball being on the previous night. All of the aircraft had been prepared the previous evening and were fully refuelled, oiled and washed and lubricated. Each crew were responsible for their aircraft for the first day and everything had to be as good as it could be with all bulbs working, all screws and bolts checked for tightness and all transparencies polished.

Anyway, the weather on Saturday morning was not wonderful with a 1000 ft cloud base and tops at 3000ft, but it was due to clear around midday. We had booked a met brief for 8am and the forecaster showed us a low pressure system which was centred over our first planned overnight stop of Limoges. This poor weather made us review the plot and we decided that a route via Bordeaux would be better and avoid a lot of the storms.

Phil Threlfall and I departed early in G-BNNT, on an IFR departure to get ahead to Jersey and assess the weather for the onward leg. Once above the cloud the flight was very pleasant, climbing up to cruise at Flight Level (FL) 70, routing to the south via Portland Bill and then direct to Jersey. Throughout the exped, the non-handling pilot did the radios and navigation so that everyone played a part in every flight. Entering the Jersey CTR on a special VFR clearance, a very smooth flight was ended after 1 hr 15 when we arrived at Jersey and parked up on the grass near the flying club.

Jersey Flying Club is very well equipped and after paying our landing fees we set about looking at a suitable route to get us to Bordeaux.

About an hour later, Seb Coe and Dan Seagrave arrived in G-CDDG, and Steve Lane and Craig Evans arrived in G PSRT.

During a working lunch the route to Bordeaux was finalised and we duly submitted our Flt plans and taxied out under one callsign for a pre-arranged streamed take-off only to taxi back in again with an electrical problem with G-BNNT. The LO Volt light would not extinguish during the power checks so the investigation involved removing the back seat to get to the battery terminals, and remove a lower engine cowling to get to the alternator. Despite wiggling everything, only one loose wire was found and a bit of chafing of the insulation of one cable, so with this duly repaired, an engine run showed that all was well as long as the rpm was maintained above 2000rpm and that electrical loading was kept to a minimum below that. Additionally, the vacuum pressure was low during the run but tightening the jubilee clips on all of the pipes cured that.

By the time we had sorted out the problem the fourth aircraft had arrived with Dave Jelly and Martin Baber. This aircraft was the most powerful having a 180hp engine so that they could catch us up. It seemed to have done what it said on the tin!

Anyway the original three aircraft then taxied out again and departed with a streamed take-off and headed South East to coast in 10 miles to the east of Dinard. That part of France is criss crossed by many military low flying corridors up to 1500ft so we cruised at 4000ft in good sunny weather with few clouds above us.

We had discussed formation flying on the ground and agreed the break manoeuvres in the various positions of a formation and we took the opportunity to practice formation flying along the way. The air was smooth as silk so it was a good introduction for those who had never done it before. Our route took us about 30 miles inland from the coast of the Bay of Biscay and parallel to it until we eventually encountered a storm as we were ten miles north of Bordeaux. It was centred over the airport at the time so we skirted around to the west of it and held off until it had passed before landing on a very wet 10000ft runway still in the pouring rain. After taxiing in we were met by the handling agent with a minibus and then transported to a rather sumptuous and expensive looking arrivals business lounge.

They provided an excellent service and located a cheap hotel for us along with taxis to take us there. By the time we had arranged everything, Dave and Martin had arrived so at last we had all of the aircraft and all of the people in the same place at the same time! It had been a very long day however and it was 9.30 before we finally got to the hotel.

A good night and some excellent French Cuisine followed before we retired ready for the next leg over the Pyrenees. We witnessed an excellent piece of tight parking when a car managed to get out of a roadside parking space with only two inches spare at either end. The idea is to drive into the other cars' bumper until that car starts to move, and then reverse and do the same to the car behind you. After around 15 shuttles your car is free to drive off to Halfords and get some touch up paint and T-Cut. Voila!

Day 2

We got to the airport early after breakfast at the hotel and got the Met and Notams from the business lounge. Our revised route would now take us via Zarragoza on the Spanish plain. Steve Lane is fluent in both French and Spanish so he was able to call them and confirm that they were open and had fuel and weren't going to fleece us for landing and handling fees. Incidentally, the landing and handling fees at Bordeaux were about 30 Euros per aircraft, which was very good given the outstanding service we got at such a large and well-equipped airfield. Even the female handling agent was pretty! You have to admire the French on some things and there was a lot of admiration that morning!

Martin and Craig decided to route via overhead Biarritz due to concern about the climb performance of their aircraft but the rest of the group took off and headed south to fly overhead the Pyrenees. The difference between aircraft performance became quite marked as the temperature rose and we climbed to get to 8500ft to get over the mountains. The trailing aircraft just could not catch up. At 40 miles south of Bordeaux the two lead aircraft had to do a large orbit to allow Steve to catch up. Next there was layer of scattered cumulus at 5000ft which caused a few problems trying to get above it but once on top we loosely formed and enjoyed spectacular views of the mountains below. The winds were Northerly and light so there was only very light turbulence as we went over the peaks. The highest points were another 10 miles to the East and strong winds can cause severe problems for aircraft that fly too close with heavy up and downdrafts.

Once over the peaks we then continued south over the Spanish Plain to Zaragoza. All clouds disappeared and you could feel the air getting hotter even though we were still up at Flight Level 85.

After just under two hours we touched down at Zaragoza, a mixed military and civil base. The controller had had some problems with our particular brand of English during the approach so we ended up with progressive taxi instructions to get to the parking bays.

Time to refuel, both the aircraft and ourselves, and pay the landing fees and go. The airport police will not allow you to proceed back to your aircraft unless you have a copy of your flight plan stamped by the accounts department. So it was back along the terminal and up the stairs that we went.

On this leg, all of the aircraft chose different routes, either east to the coast and then down to Valencia or direct over the mountains. . We all took different routes to Valencia from here but ended up routing in via the various reporting points, with some having to hold off while holiday scheduled traffic made their approaches.

Refuelling here was pretty much the same as refuelling your car. Taxi up to the pumps, squirt the fuel in and give the attendant your credit card, except that the bill is a bit bigger and they don't sell snacks, newspapers or barbecue coals.

The problem was that we were parked on the far side of the airfield away from the pumps so it took a bit more messing around to complete it.

Additionally, Serviceair, the handling agent charged us 24Euros for the bus journey from the South side to the terminal. Having got to the terminal we found out that there was an Ibis Hotel near the airport and we just wanted to find somewhere to go as quickly as possible.

We bundled our kit into two taxis and were just about to leave when Martin spotted the hotel from where we were. It looked about 1 minute's drive away. Exit taxis and start walking, much to the disappointment of the taxi drivers.

After a very long, hot and tiring day we just dumped the bags in the hotel foyer and had a drink in the bar to cool down. Five hours and many beers and pizzas later, we left the bar and crashed out in the hotel rooms.

The biggest issue, which we found everywhere we went, was how much time was wasted waiting for fuel, handling, transport or finding hotels. The saying "time to spare, go by air" was really proven to be true all around the route. We had done all that we could to try and minimise this before we left Lyneham such as having pre-printed flight plans, with all of the basics filled in, and having prepared the maps as much as possible, but ultimately you are always in the hands of someone else's timekeeping and sense of urgency.

Day 3

Once again, blue sunny skies welcomed us as we set off on our walk to the airport. Eight figures, weighed down with kit like packhorses, trudging along in the heat, were especially relieved upon arriving in the air-conditioned flight-planning department. Flight plans submitted, weather and Notams checked,

another Serviceair bus to take us to the aircraft and soon we were ready to go.

Two aircraft still needed fuel so the two others set off together. We had spoken to the tower beforehand and had got approval for a pairs take-off with Dave and me in DG and Seb and Phil in CP. This was very smartly executed followed by exiting the zone in formation via the numerous visual reporting points.

This leg took us over some interesting terrain as we routed directly to Almeria on the Southeastern tip of southern Spain. We had decided to make this a more traditional leg with reliance more on basic dead reckoning and looking out for features than radio navigation. With not so much as a ripple in the air, close formation flying was easy and rewarding as we made our way towards the southern coast at 6500ft.

Flight plans are mandatory in Spain for all flights but it does mean that wherever you fly, your details are known by all of the controllers and you are allocated one transponder code for your entire flight. The service given by the Air Traffic Controllers was excellent throughout Spain, all being helpful and very fluent in English. In fact, throughout Europe it was really refreshing that everyone seemed to be really laid back about light aircraft.

Descending to 1000ft AGL, we flew 10 miles along the coast packed with holidaymakers before turning inland to pick up a reporting point for Almeria. A landscape covered in greenhouses prompted an interesting talking point about where we would go if the engine stopped!

Almeria is a coastal airport, blessed with regular gusty conditions and it made no exception for our arrival. The wind was 10 degrees off the strip at 15 gusting 25 knots and 25degrees, which makes for a challenging arrival.

Almeria is a very pleasant airport but we didn't have time to hang around so it was a, by now, familiar routine of submitting flt plans, eating, paying bills and refuelling before departing for North Africa.

Our routing followed the coast of Spain to Gibraltar and then crossing the straits to Tangier. We flew as individual aircraft and departed separately at different times. The route involves flying through the Malaga control area and a mile past the end of the main runway but once again the controllers accommodated everyone without any fuss

Passing Gibraltar, we called in to let them know that we were en-route and would see them later.

Half an hour after passing Gibraltar, the wheels squeaked as Dave landed on Tangiers 10000ft runway, followed by a long taxi ride to the refuel point where Seb and Craig were

Tangier was a necessary stop because the Spanish do not permit aircraft to fly direct to Gibraltar from Spain. We were here to refuel, turn around and go back to Gibraltar.

The refuel was a long drawn out affair with the guy first hand pumping fuel into a glass jar so that we could inspect it before continuing to pump into the aircraft. Hand pumping continued for about half an hour before someone else pitched up with a car battery and a set of jump leads and got the electric pump working for the other aircraft. In the meantime we had to clear immigration and pay the landing fees, a whole two euros per aircraft!

However all of the aircraft paperwork was subject to quite some scrutiny and each crew was given a briefing on departure procedures.

After everyone had refuelled, we had to pay for the fuel in local currency of Dirhams and were duly escorted to a cash point machine. Unfortunately, the machine gave us the money without a receipt and, despite having witnessed us getting the cash, the fuel man would not accept the money without a receipt! Apparently, his boss might have thought that the money was forged so no receipt, no payment. This stalemate lasted about an hour of arguing before the owner of the cash machine pitched up and found our receipt inside. Back to the aircraft and we all started up and taxied in a long line. An excessive mag drop unfortunately saw me and Dave taxiing back in with Seb and Craig who had the spare plugs and leads.

Craig went in to the checkpoint to explain our problem and was immediately given a demand for parking fees, as we had been there over 3 hours. With this paid and the engine problem sorted through leaning and reseating the leads we eventually took off and headed for Gibraltar.

Gibraltar presents a couple of problems, which need close attention. The Spanish have created a rather restrictive prohibited area around to the West and North of the Rock, which must be avoided. Gibraltar Radar gave us vectors to ensure that we did not infringe this and any flight further North than the extended runway centreline will be in that area.

The weather around the Rock is also well known for causing problems. Exposed to both the Atlantic and Mediterranean, the Rock creates its own weather, often having high winds, fog and low cloud. A strong southerly wind will develop very extreme turbulence on final for which it is notorious, often resulting in aircraft diverting.

Fortunately for us, the wind was a light easterly straight down the strip and it was with a sense of great relief when our twenty-minute flight ended with us finally touching down and parking up outside the Visiting Aircraft Section who had waited late for us.

An elated group of 8 then quenched a raging thirst with beer provided by the VASS guys and celebrated our arrival.

Day 4

After a night of celebration we spent the following day touring the Rock involving a trip up to the top of the Rock followed by a tour of the caves and of the tunnel networks. Martin was unfortunate enough to become a victim of theft while leaving a café on the Rock, when one of the infamous Rock Apes stole his Cornetto from his hand. It then shot up a tree and just sat there eating the ice cream and throwing shreds of discarded wrapper down at Martin.

We also took the opportunity to repair the RH seat of NT. The seat back had completely broken and detached from the seat, converting itself into a sunlounger. It needed welding and Station workshops did an outstanding job for us.

That evening we had a meal at a seafood restaurant over the border in the Spanish town of La Linea. Dave demonstrated his army skills by helping the Chef to prepare his live lobster.

Needless to say it wasn't moving much after duelling with Dave's Sheffield steel!

Day 5

The day off was a welcome relief from what had been very long and quite punishing days but we were well refreshed for the next part of the exped. The original plan had been to fly via Tangier to Portimao in southern Portugal, clear customs and then go on to Cascais near Lisbon. However, the weather over Portimao was marginal and we decided to avoid going back to Tangier given the problems that we had had.

A route direct to Cascais would be the only flight of the day and take 3 and half hours and we would avoid the weather and hopefully get to the hotel before dark for once.

So we set off, routing back down the Straits to avoid the prohibited areas and then coast around past Cadiz. Flying over Trafalgar, we then coasted in 40 miles to the West of Faro before being given a direct course to the Espichel VOR. A smooth and uneventful flight soon developed problems as we contacted Lisbon control. They were adamant that we could not proceed to Cascais, as there was no customs there and despite insisting that we had notified them in advance as required, we had to land at Lisbon.

Now, Lisbon is the Portuguese equivalent of Heathrow and is shut to VFR traffic but despite that they put us into a hold over Espichel for half an hour while they shuffled the slot times of all of the other holiday air traffic so that we could approach. One by one we did an approach and landed, being greeted by airport police as we shut down.

We then completed flight plans for a ten minute flight to Cascais and had to wait an hour before a handling agent arrived to deal with us. While I was taken away to pay the bill, the rest of the guys shared out the fuel that everyone had by defueling into empty water bottles and refuelling from them so that everyone had roughly the same. I was relieved of 800 Euros in unwanted landing and handling fees. Ouch! It felt like we had been mugged.

Starting up and taxiing out in turn, we then joined a queue of Airbuses and Boeings waiting to take-off. I can't imagine what they were thinking about our presence there and that their slot times were being bumped because of us. But we had paid heavily for that dubious honour.

One by one we took off and made our way west to Cascais, landing once again with a feeling of quite some relief. After refuelling, it didn't take long to get to the hotel and once again we were all shattered.

Day 6

Our next leg took us to Braganca in the Northeast corner of Portugal, a regional airfield at 2240 ft with temperatures in the mid thirties. This flight involved very close scrutiny of the flight manuals to ensure that we had sufficient performance to operate out of the place with the loaded aircraft. We duly left and enjoyed a very pleasant flight, courtesy once again of a tail wind, and arrived in good time, for lunch and planning for the next leg. Two huge PZL crop sprayers operate from there and we spoke with envy to the pilots about the performance of their 1000hp radial engines.

After a brief lunch and more planning we then set off for Burgos in Spain. Even hotter and higher at 3000ft, it had been the venue for the World Aerobatic championships the week before and had good facilities. We landed after an uneventful flight across some beautiful scenery which gradually flattened out to become desert.

Seb had a problem with the airspeed indicator on his aircraft. The reading had been gradually reducing during his last flight, necessitating him landing using rpm, GPS groundspeed and an extra bit for the kids.

After a bit of investigation I found a leak from the ends of the rubber pipework going into a Tee piece behind the instrument panel. The rubber hoses had split due to age and the high temperatures, but fortunately I was able to cut the split portion away with enough hose remaining to reclamp it.

A leak and sense check using borrowed kit saw the problem fixed and once again we were all serviceable.

As a CAA licensed engineer, I was fortunate to be able to deal with almost any engineering problem that might have come our way, and I had spoken at length about this with all of the engineering organisations responsible for each of the aircraft. I kept them abreast of any rectifications that I did so that they could make the relevant logbook entries and sign them off.

There was, of course, a back up plan.

If it was not possible to repair one of the aircraft, there was enough room in the other three aircraft to carry two more people and their kit. This would have a small effect on the range and endurance but at least we would still have an expedition and a recovery plan for the other aircraft could be sorted out later.

Day 7

A bright morning greeted us after a quiet night in Burgos as we arose refreshed and ready for another challenge. After refuelling we checked out the weather, which was good at our destination but a little marginal along the coast near Biarritz with a forecast to clear later. We set off after a delay for weather, routing overhead Vitoria and San Sebastian before descending over the Bay of Biscay and heading North up the coast. Our next destination was a little airfield called Mimizan.

Located about 50 miles southwest of Bordeaux, this was a quaint hard strip with lots of parachuting going on and a really nice atmosphere. The locals gave us a warm welcome after our arrival, with a nice old gent operating the refuel pumps for us.

Thence to the planning room, we had a working lunch to decide our next route.

The original plan had been to go to La Rochelle, but when we rang them up they refused to allow us in and gave us no reason.

Steve's native French was invaluable, but in this situation it was the one single factor that got us on our way. He rang up 4 other airfields to no avail but finally Niort Souche accepted us. Trying to get hold of someone at an airfield on a Friday afternoon had proved difficult to say the least but now we were once again on our way. Having carefully planned our route well in advance, we often found that we had to change the itinerary due to weather, serviceability, immigration or a multitude of other reasons. This left us a little exposed but we just had to deal with every situation as it presented itself and that's what expeditions are all about.

Flying along the coast of the Bay of Biscay along miles of empty sandy beaches was an absolute pleasure. At 500ft above the sea it was easier to see lots more of the features of the coastline, weaving as necessary to avoid people, boats and kite surfers. Turning inland over the estuary of the Gironde River our route took us past the town of Roquefort before reaching our final night stop at Noirt.

The common reception that we got on the ground everywhere that we went was a great welcome from the locals, who were a little bemused to see eight Brits pitching up in their four little flying machines, packed as they were with nav bags, toolkits, spare wheels and personal kit. There is a sort of bond between all people who share similar hobbies, whatever they may be, and aviation is no different. Locals all enquired about what we were doing and where we had been, raised eyebrows were followed by envious grinning when told about our trek and experiences.

Noirt was a pleasant town and we soon found a hotel and, for the first time, actually arrived there during daylight. We allowed ourselves a late night and a late start for this last stop giving everyone a chance unwind a bit before the final days flying.

Day 8

Once again blue skies greeted us upon our arrival at the aircraft before we commenced the by now very familiar routine of getting weather and Notams, checking the aircraft and submitting flight plans. Once again we had a tailwind. A very unusual weather situation had meant that we had had a tailwind component on every day that we had flown. It had literally followed us around throughout the week saving us both time and fuel. Guernsey was our next stop, to pick up fuel and swap crews before our final leg. We all flew there independently routeing past Nantes and Rennes before coasting out over St Malo. Arrival at Guernsey was pretty straightforward as we landed and taxied up to the grass for refuel next to the Tower.

We had all done lots of formation flying around the route but we wanted to arrive back at Lyneham as a fourship in a diamond formation. We did an extensive briefing in the terminal about how we would do this and the break

manoeuvres for this formation. As it turned out, Dave's family and friends were going to be at a church fete not far from our route so a flypast was also planned into our routine.

A streamed take-off from Guernsey saw us all heading north, slowly closing on each other, once again due to differing performance. Eventually the formation had formed loosely at Flight Level 50 coasting in again at Portland Bill. Slowly descending to 1000ft we then levelled off briefly before tightening up the formation and flying past Dave's village at 600ft.

Then positioning on the extended centreline of runway 24 at Lyneham, the diamond formation carried out a 500ft run and break before landing in turn. Having vacated the runway, all aircraft stopped until the last one was in line with the others, taxiing in as a line of four to stop on the spots where we had left a week before and being met by the club OIC, S/Ldr BJ Maclean.

The sense of elation, achievement and relief was amazing as we came to terms with what we had achieved. Some of the pilots had only just gained their pilots licences before we left, and now, having flown over 3000 miles they had seen and done things that the vast majority of UK private pilots would never do. And all in just one week!

The expedition was only possible due to the sponsorship and support of a number of organisations. The Royal Air Force Flying Clubs Association (RAFFCA), were pivotal in giving us strong financial and organisational support, especially the links to other flying clubs which helped us. We also received additional funding from Babcock and Rolls Royce as well as the Station Gymnasium and I would like to extend thanks to all of those organisations and individuals who helped this expedition happen.

Flying in an RAF Flying Club is cheaper than you might think so if you fancy learning to fly and going on an expedition like this one, check out www.raffca.org.uk for details of your nearest club. You only have one life, so make it count.