

# **ICELAND AIRVENTURE 2014**



**Let's try and fly around Iceland, in a day!**

I was on my way to Oshkosh and the famed EAA Airventure 2014, so I thought it apt to name my Dawn to Dusk challenge 'Iceland Airventure 2014'. I could have entitled my entry to the 50<sup>th</sup> Anniversary Dawn to Dusk competition any of the following titles.

- 1: How many volcanoes can I fly round in one day?
- 2: How many glaciers can I fly around in one day?
- 3: How many types of cloud can I see in one day?

But I am happy with the title and I hope you will agree that after reading this report, indeed it was simply a great flying air adventure...

Just out of interest, it was 30 dormant volcanoes or Gigur's, 51 glaciers or Jokull's and 12 types of cloud, including a very nasty role cloud... Sorry, I have no idea what cloud is in Icelandic.



Roll cloud below the mountains off shore near Akureyri. The far end could be seen spinning!

I knew that if I departed this year on my tour of the world in my Kr2, then I would be in Iceland on or around the longest day of the year. I studied the sun rise and sun set times and the dusk and dawn period. Sun rise on the longest day in Akureyri, Northern Iceland, my intended start point, was at 2:10am local. This meant I could start my attempt at 1:40am local. Sunset was not until 12.10am the next day, meaning I could fly on till 12.40am local. That is 23 hours of daylight available and I could fly in the midnight sun, something I've always wanted to do...



Dawn and Dusk in Iceland.

In 2009 I entered the Dawn to Dusk competition and did quite well, I tried to fly around the coast line of the mainland of Great Britain in one day. It was some 2,000 nautical miles. I enjoyed the journey so much, seeing so many various sights in the space of a few hours, surely Iceland wouldn't disappoint. So I set out to achieve this circumnavigation.

The rough course around Iceland looked like only 1,336 nm, about 2/3rds of the GB coast and I had 5 more hours of day light on the longest day. It should be easy.

I wouldn't plan it here though in the UK, I was too busy trying to depart and anyway the local pilot's experience would be invaluable in helping me plan when in Iceland. I had to get there first of course, which is a separate story on its own, but not that relevant to this report.

The only relevance to this journey was that my latest KR2 G-BYLP has a bigger fuel tank than the aircraft I used 2009, G-BSTL. I wasn't then going to need a reserve tank to fly to Oshkosh. But the Canadian's scuppered that idea by insisting I fly to Iqaluit or Frobisher Bay being the English name, not to Cape Dyre as planned. I didn't have the range and safety to reach Iqaluit. So the long range tank I made for my 2009 Dawn to Dusk attempt was shipped out to me in Iceland. Now I can have 7 hours of fuel on board and only refuel once if I want to. But two 7 hour stints around Iceland I felt too uncomfortable with. I would take the tank with me and use it on the leg from Reykjavik to Egilsstadir though, as this made a leg that was close to the end of my endurance, then well within it.



My fuel tank arriving in the post.

On arrival in Iceland on the 4<sup>th</sup> of July in Egilsstaðir, after settling in, I flew on to Akureyri. At Akureyri was the famed Flugsafn Islands Aviation Museum. I originally thought it would be a good place to start and finish the circumnavigation attempt. But after a few days there and caught with bad weather and little resources, I had to move on for the benefit of the overall journey. Anyway, I was advised to fly to Reykjavik and to taxi down to Geirfugl, the biggest flying school in Iceland, where I was promised all the backing I would ever need. This I duly did, much to the bemusement of air traffic control at Reykjavik when a complete stranger and foreigner requested to “Taxi via Echo and Golf to Geirfugl takk feyri!” as if I knew where I was going.



On arrival at the club hangars, I was warmly greeted and guided by the Manager of Geirfugl, Gudmunder Sveinbjornsson, or Gummy to his friends and Thurther, a young trainee pilot who took me under his wings. They assisted me, as all other pilots from Geirfugl Flugskoli did, without request and without consideration to their own time. It seemed fun for them to assist in the planning and logistics of such an attempt.

Ok, it was time to get serious about this flight. I read the rules out loud to the students and members of Geirfugl. They all spoke pretty good English.

From the front page of the ‘Competition rules’ they listened intently.

The Objective,

To encourage the most interesting employment of a flying machine within the limits of competent airmanship and to demonstrate the capabilities of pilot and machine in a days flying during the hours between Dawn to Dusk in terms of furthering some original and praiseworthy objective. I'll reiterate, "between Dawn and Dusk" the actual words... Ok.

Now, none of the twenty or so pilots and students had ever thought of flying around their coast and in a day... They had flown all over the island and around it but not out to sea and not in one day. There was quite some excitement...

Ok, I now read out the "Competition Rules", just to be clear...

Rule 1: The competition may be attempted any day between the hours of 4.30am and 9.30pm. WHAT??? That's not dawn to dusk, its like, morning till early evening here... That's not fair! Gosh, I wish I had read these rules in more depth before I left England. That's just cut 5 hours off the available time... I perused the rest of the rules in detail to see if anything else was ambiguous. I'd come to Iceland thinking I was going to be able to fly virtually all day and over some vast amount of miles... Could this coastal flight now be done?

It was agreed to break the flight into four legs going anti-clockwise.

The first being the Reykjavik flat lands, south and south east coast, the east and north eastern fjords to Egilsstadir. It would be the longest leg but that was not a problem, I'd prefer that. At 403 nautical miles it would take some 4:30 hours.

The second leg being the northern fjords to Akureyri. 246 nautical miles some 3 hours.

The third leg, the north western fjords to Isafjordur. 248 nautical miles, another 3 hours.

And the final leg, the western fjords back to Reykjavik. 266 nautical miles, again 3 hours.

So that is 13:30 hours of flying and with 3 refuelling stops of 30 minutes each, that is a total of 15 hours of flying, the competition rules allowing 17 hours during the day. 2 hours to spare.

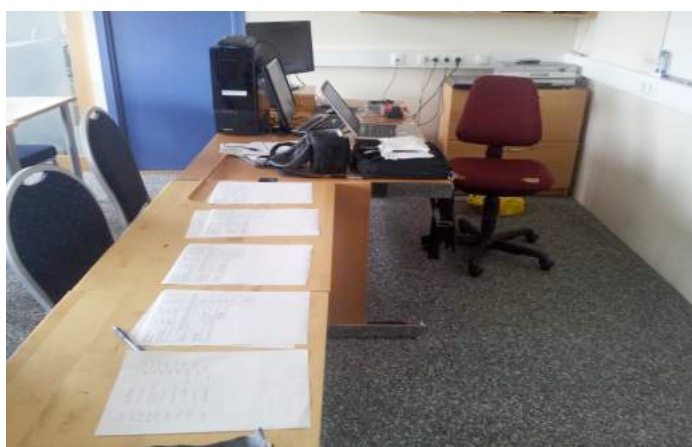
All we needed now was the weather slot. 2014 unfortunately had the reputation of being the worst summer since 2013. Unfortunately 2013 was the worst and wettest summer on record.

Basically I waited a week, with nothing but weather front after weather front. A low system had sat about 500 miles south of Iceland for over a month, stuck in a continuing cycle. Just as it came to weaken and dissipate, it would allow another low pressure off the coast of Greenland or coming up the American eastern sea front to join it and reinvigorate the system into throwing off more weather fronts.



hours in the main tank. At Akureyri I again would fill only the main tank as the next flight to Isafjordur, and its famous bent approach to their runway, along the side of the Fjord, was 281 miles. Back to Reykjavik was then just 306 miles and easily reachable with just a full main tank. Total distance for the day of some 1,330 miles, 1,109 nautical miles or 2,200 kilometers and a flight time of some 14 hours or so.

I had my fine pitch prop fitted for the trip around the world. It gave me better take off performance and climb rate, needed for such a journey in some circumstances, but it was not very good for a high cruise speed. A comfortable 110knots was all that was possible and I didn't want to thrash the engine at max continuous rpm as it was hopefully going to take me all the way around the world and the next flight would be across 4 hours of 2 degree Celsius Atlantic Ocean. So pushing the engine was not on the cards...



Ok, so there was a little seismology over night but no new volcanic activity with zero ash in the air, not that it would affect my piston engine like it does the jet engines.



I would go anti-clockwise around as I did when encircling Great Britain, this was so I could see the coastline clearer from my left side of the cockpit. There was a small low pressure centred over the north of the island with air circulating anticlockwise around it, so I could expect light tail winds. The rest of the Atlantic surface pressure

chart analysis was full of every type of front imaginable. But the way that they would progress through the day and I would hopefully progress, meant that there could be a window of opportunity of no fronts to be flown through all the way around. We would see.

The next item to check was the road condition Web Cams. They are situated all over Iceland and they are primarily to check on road conditions. Normally there are three web cams, one looking left, one looking directly down onto the road next to a snow depth gauge and one looking to the right. The clever thing about these web cams is that they can show the proceeding few hours in 15 minute intervals. Looking at these images you can clearly see the cloud base, but more importantly you can see if it is rising or falling. My area of concern was around the Gardur peninsular and the nearby Keflavik International Airport, which always seemed to be fogged in during the morning. It was clear. Also and the Metar and TAF for Keflavik were not good, but not that bad, with some cloud at 800ft, but the cloud base had been rising over the last few hours. There was some sun shining on some of the web cams which considering the recent weather, was a bonus...



Refuelling the evening before in good conditions. 100 litres in the main tank and 40 litres on the passenger seat tank.

I put on my immersion suit and life jacket as during the day, some of the flight would require a sea ditching if the engine stopped. The water on the east of the island was a barmy 8 degrees Celsius and 3 degrees on the west coast. That gives you about 15 minutes to climb into your life raft before losing use of your hands. Without an immersion suit, you are incapable of climbing into your life raft after about 4 minutes and then you would be dead within the hour.

Even though it had been daylight since 2am, the airport did not open till 7am local. By the time I had satisfied myself that the morning fog around Keflavik would not develop, climb on board, taxi out, call my flight plan over the radio, complete run up checks and taxi to hold short of their runway 13, it was just before 8am.



**VFR departure and arrival routes along with the frequencies in and out of Reykjavik.**

**Airborne on the hour, the Reykjavik controller cleared me low level via the coast and he said he would get on to Keflavik to make sure they let me do the same. Keflavik were not busy so that was no problem for them and they told me to report Gard-skagi Light house. ‘Skagi’ meaning peninsular. I’d been there in the car and recognised it easily. The steam from the famous hot spa pools of the famous ‘Blue Lagoon’ just disappeared into low cloud inland and there was a fog bank way below a few miles off shore.**



**Hum, 20 minutes later and I was already forced down below 500ft near Porlakshoen. There was skud cloud hanging everywhere, occasionally the sea fog would role onto the shore or the ground fog would drift out to sea. There was lenticular cloud up high over the volcanoes inland, layered stratus at several layers, too many to count or see.**





The newly formed islands of Vestmannaeyjar peered out the murk and fog 5 miles off shore while the black beaches from the ash from the latest eruptions of Eyjafjalla-Jokul whizzed by just below my Kr2's left wingtip. The unpronounceable Eyjafjalla-Jokul was the volcano responsible for closing down most of Europe's airports and airspace as it jettisoned clouds of ash tens of thousands of feet into the air and it is a relatively small volcano. If it's neighbour Myrdals-Jokull or the vast Vatna-Jokull erupt, it will be a sight to see... But not this close... The word 'Jokull' after the name means 'Glacier' or 'capped with a glacier'. Myrdals-Jokull is looking like it's awakening. There is constant seismic activity there now and a mass outflow of glacial melt water flooded the highway just last week causing evacuations, but it seems to have calmed down a little.



The map and breakfast sit on top of the long range tank while out the window off shore the fog bank sits there covering Vestmannaeyjar Island and onland, countless types of cloud cover the coast and the volcanoes of the unpronounceable Eyjafjalla-Jokul.

If a smaller volcano erupts it's not really a big deal, but if the volcano is high enough to be capped in snow and ice, when the magna rises closer to the surface, this glacier melts, sending millions of gallons of water down to meet the molten lava coming up. These two don't really mix too well and the water boils, building steam pressure like a

steam train except there is no 'blow off safety valve'. So when the top cap finally comes off the volcanoes crater, it goes with a bit of a bang. As happened with Eyjafjalla.



The fallout ash from Eyjafjalla-Jokul changed the coastline and path of rivers. This house was apparently on the coast. The haven't got round to digging it out yet...

At Dyrholaey there is a famous outcrop of lava that stands firm and leads out into the sea. It has collapsed a few times over the years with sea weathering. At the moment it has created an arch that the pilots are having fun flying under and through. It is about 60 feet across and 30 feet high. So so tempting. The only cause for concern is sea birds and as I fly over the arch, not under it, I made a wise choice... There were seagulls everywhere.



On shore the land is covered in cloud and 2 miles off shore there is an endless bank of fog. But the coast is clear and I'm blasting down it now with quite a tail wind. I've been transferring fuel in little stages, any time I can get more into the main tank. As this moves the CofG further forward the aircraft slows down, but it is nicer to fly and not so twitchy. That's about all in the front tank now. I've pumped through the 40 litres.

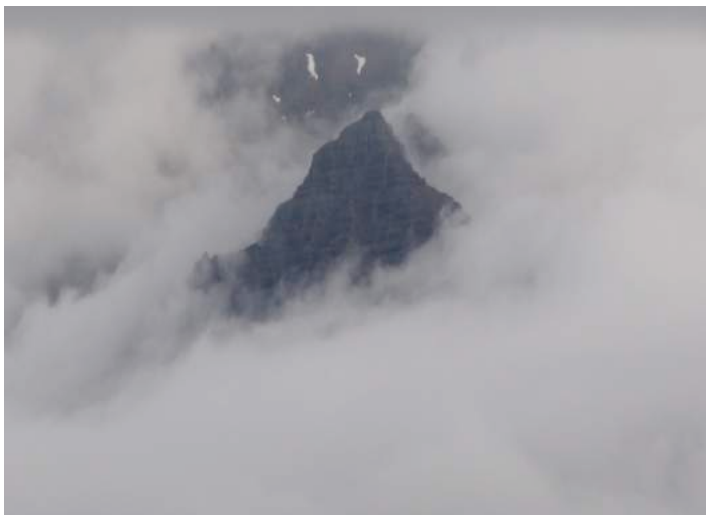
At Jokulsarlon a lake has formed, as the coast line is backed up by the sea. The lake is fed from Breioamerkur-Jokull and as the glacier breaks into the lake, icebergs float off. They then follow the flow of the lake to the outlet but get blocked by its size and theirs. A back log of icebergs then piles up into the lake also. The main ring road

**‘Highway 1’ passes over the river right next to where the icebergs are jammed. It’s a great tourist spot and I struggle to count all the tourist coaches parked up there.**



**But now I’m not feeling so great, almost nauseas and disorientated. I’m not sure if it is just tiredness, the lack of a defined horizon, the continual requirements for pitch, roll and yaw adjustments of my twitchy Kr2. But I’ve never suffered from this before.**

**Maybe it is the smell of the venting avgas from the tank sitting next to me, but I have the fresh air vent blasting fresh air in my face? I don’t know but it’s not pleasant. I tried drinking a lot of water in case I was dehydrated. I think it helped.**



**I’ve not got above 1,000 feet so far today in showers and fog, while on shore more cloud is forming with some cumulostratus embedded in them.**

**If only the cloud would lift, Iceland’s Ice cap the glacier and rivers flow down from would be in view. But it stays hidden in the cloud onshore.**



**As I turn to go up the east coast fjords the sea fog clears. The sun is out and altocumulus and upper cirrus is now the order of the day. But the altocumulus is only at the end of each fjord, so I can safely climb and fly over it as it is only in 5 mile wide bands.**



**The cloud clears completely further north and I get a clearer look at the mountains I nearly collided with when arriving in Iceland a few weeks ago and the fjord I couldn't pass through.**



**Strange, I could fly straight there today on my way to Egilsstadir but now I have to follow the coast again. I remember the path I took, but last time I was down at 300ft this time, at 3,000ft I feel a lot more comfortable.**

**I fly inland for the first time to head for my first refuelling stop. The wind is from the south so I can fly straight in for their runway 22 and I land 4:12 hours after taking off, some 45 minutes ahead of my ETA, excellent.**



**As I pulled up to the fuel taps I'm confronted by another 'G' registered aircraft, a CT micro-light. The pilot is Ed McCallum. He has flown to Oshkosh, I had read about him being there. Now he is on his way back... Well well well. He is in a rush. He asked me if I had any narrow escapes so far? "Yes." I said. He replies that he had been down to 300ft crossing to Kulusuk twice due to weather fronts and is he mad? I would have to say "yes!" personally, I won't fly through warm or cold fronts, especially on such a dangerous flight anyway. He jumps in and taxi's off on his way to Wick Scotland. Wow! What a coincidence... I refuelled. I only need 32 litres to refill the main tank. I pay for the fuel with Jhoan. I know him well since chatting the last time I was here. No one can forget that quite yet... A quick trip to the toilet and I jump back in.**

**Airborne again at 13:06, that was almost an hour on the ground. But chatting had been nice and I can easily get around today weather permitting and even though I'm trying to set a record, it does not warrant being hasty with people.**

**The north east of Iceland is quite flat really and the flight goes well before reaching the mountains around Akureyri. There is a strong southerly airflow now and I know its going to be rough flying downwind of the mountains before entering the Eyja-fjord. Wow, as I round the final teeth jerking mountainside I'm confronted with a five mile long role cloud. It has no flat base, it's just a cone of cloud spinning around and I'm not going to get anywhere near that severe turbulence. As the cloud narrows to a point I can see the end spinning????!!**

**I approach Akureyri and I'm told to report 'Down wind right hand for runway 01.' That's north, but I've just been flying into a strong southerly headwind. This will be landing down wind. But nope. I've heard of this before. You can have the wind blowing different ways on each end of the runways as the air masses converge over the airfield. I'm number three to land. I can't miss the Foker 50 as it touches down but where is the new number one that I am to follow. I extend down wind. Oh it's a tiny micro-light, no wonder I couldn't see him down there. I landed at 3:34pm after 2:28hours of flight, ahead of schedule again. Great! I refuelled with 52 litres of fuel and made a sandwich, as I've not really eaten yet.**



**Refuelling at Akureyri. One of the off road vehicles set up with snow and glacier tyres.**

**Ok, back in the air by 4.25pm with only another 2:30 hour flight to the next stop at Isafjordur. This is on. I can get round... Hum... My artificial horizon hasn't erected. It sometimes does this if you run it back up before it stops completely, then it takes some time to re-gather its thoughts, but I was on the ground for about 40 minutes. It should have stopped completely in that time. I can't feel any rotation from the tired bearings on the glass front and it shows no life at all as I swing the aircraft around. Oh well...**



**Ok, around the Trolla-skagi mountain range, across the Skaga-fjord. Layers of cloud again but no real worries. The Skagaheidi peninsula is flat, hardly above sea level, about 30 miles long, 10 miles wide and there is cloud on the horizon to the north. I can see across the peninsular at this height and the sun is shining on Hunafloi, a massive 40 mile wide expanse of sea that separates mainland Iceland from the North West Fjords, the most spectacular part of the country apparently. They must be pretty impressive as what I have seen so far is pretty good.**

**I'm diving down now as an unbelievably straight line of cloud is rolling in as far as I can see. Down at 500ft, dam this isn't cloud, it's a fog bank the likes I have never seen. It has a wall which is as straight as a die each way out of sight and it is heading inland. I've got to get around the peninsular before it engulfs it. No worries, I am but 3 miles from the top, then I can turn west for some 10 miles and can head south again away from the fog bank. I fly into the fog at Skgata point. The sun is still shining on the sea on the other side of the flat peninsular. I just need to get around the headland at Selvikurtangi and I'll be ok. I'm doing 130knots, pushing the engine like I said I wouldn't, but it won't be for long. I'll soon be back out of the mist.**

**Hang on, the visibility is getting worse and really quite bad. I turn Selvikurtangi, waved at the people outside the hotel at Hafoif, the only building on the peninsular at about roof top height, but now I can see down better than I can see ahead and I'm only at about 50ft. What is going on? This fog bank isn't travelling at 120 knots or I would be doing 250 knots across the ground, but yet I'm loosing sight of the ground now. How can this be? Then it dawned... This fog isn't travelling faster than I can fly, it's being created, it is forming faster than I can fly... That's bad news. I have no option. I'm not going to out run it and I have no artificial horizon either.**



**A fast approaching straight line of fog, by the time I climbed above, it was way ahead!?! All I can do is pull up and aim for the sun and keep it in the same place in the canopy. At a vertical speed of 120 knots I pop out of the fog in about 20 seconds of climbing. My goodness, the fog bank rolling in was miles ahead of me now!!! I headed south as quickly as I could, sorry engine...**

**The fog bank slowed as it came up against the outflow off the highland area south of the Huna-fjord and I got ahead of it. I looked back at the North Eastern Fjord land, the mountains sticking out the cloud and fog. Dam dam dam dam dam!!!!**

**Scuppered again. Am I not allowed to achieve anything in life... I was getting close but no, it was taken away from me again. The weather gods had acted again... I circled around a few times...**

**Options: 1, fly around the Fjordland using GPS to continue my around the coast attempt, hoping the fog may abate and not be covering my final fuel stop of Isafjordur or: 2, go home... Argh!**

**Home didn't look too clever either, there was no way to fly direct on route. It looked really black, dark and threatening in land and high! Hum, I've got 2 hours of fuel left to do something.**



**The direct route back to Reykjavik, with cloud covering high ground**

**I headed south anyway and up the Hruta-fjord. As I looked west it looked brighter out to sea... I'd rather fly over the sea than get caught out over land. The Fjordland ought to be causing a barrier to the poor weather coming down from the north. I'd go for it and I followed the road over the highlands to Budardalur. There was an airfield there I could put down on as well. It got a bit narrow and the cloud lowered, but I was soon through to the ocean and the Breioa-fjord. Now to head south...The Snaefellsnes peninsular was in rain as far as I could see west, so there was no point in going around it. To the north the sun shone on a thousand islands and it looked beautiful but lets just go home and call it a day.**





**Again through a south facing valley, topped by cloud, it looked brighter. So again I followed the road over the hills over the Heydalur pass and out over a lava flow to the sea. It was brighter and now I could hear and call Reykjavik as they were now in line of site. I called up the approach frequency and got my safety flight plan that was opened when leaving Akureyri to Isafjordur modified for a divert back to Reykjavik.**



**The weather was quite clear now and I climbed back up to 2,000ft, which seemed quite high for the day. I was asked to call passing Akranes and to Squark 2127. My approach to Reykjavik would be via the 'VFR route 1' then following the coast for a left base for runway 13, the runway I had took off from. I flew over the Suburbs of Reykjavik with the Cathedral in the centre of town just of the wingtip before touching back down... I was back by 7.05pm... Very, very, very disappointed! That coast flight in a day was easily possible, if I only had the weather.**



**Ok so now it was time to check over the plane and load it up ready for the flight to Greenland. I'd flown 9:20 hours today. That would almost have seen me in Canada.**

**Thurthur turned up. I shook my head... He knew. I spent a few hours chatting to all the other pilots. Not that I needed to gain their respect, but them hearing from Thurthur what I had tried to do today, it certainly did gain their respect. I'm now seen as an equal fellow true Icelandic pilot. I'm officially as nuts as they are...**



**The weather looked good tomorrow, but I had no working artificial horizon. It's simply not safe to do what I'm doing without one. So I'm going nowhere till I can fix it.**

**Thought for the day: I'm deemed to not be allowed to complete anything in my life. No worries, I'm quite used to it. I didn't get around Britain in a day either. Today I had done some of my best flying ever, made the best decisions and done the hard bits, but the weather gods still took it all away.**

End of my diary for the day.

I'd like to add that their Icelandic Aviation map hasn't been updated since 2008 because no one uses it. It is hated by the pilots, falls apart instantly. I only used my new map twice before it became a jigsaw puzzle. All the pilots use a road map, just like I had been doing.

I'd also like to add that the normal 500ft 'rule 5' doesn't apply in Iceland. They fly to get a job done and the weather is indeed so unpredictable, I didn't meet one single pilot who had not been caught out by the weather on many occasions. It seemed an occupational norm here and following the roads over the hills was a common practice.

Some pilots said that no one would try to do what I had done, because with whatever wind patterns there are, the air flow always causes problems somewhere around the island. They said it would hardly ever be possibly to fly VFR around the coast. The cold air flow off the glaciers, differencing sea temperatures from east to west coast, mountain wave behaviour, thermic activity off the black ash fields and countless other local conditions always adds up to some poor conditions somewhere on the island.

I'm pretty competitive. I don't often do something unless I think I can complete it. So their words were quite comforting considering how gutted I felt at failing. They said I should get full marks for difficulty, because it was so difficult to do - it wasn't really possible... It was explained that I had been thwarted by the Nordfjardarpoka. North Fjord Fog. A relatively rare but well documented natural occurrence.



Thanks for reading this. I hope it didn't go on too long or bore you to tears. A few people that have read it here in America want to read it twice. Either because they enjoyed it or because it doesn't really make much sense the first time. They are too polite to say.

Regards,

Colin Hales and Itzy, G-BYLP.

