

Il risk is relative. One man's danger is another man's thrill; some people do, daily and for a living, things that others would decline to try once. In aviation we do whatever we can to reduce the risks, but there are some facets of the business where the odds are far from inviting, and you go anyway.

If you were crossing the North Atlantic in a light aircraft you'd probably want to do it in summer, with two engines or at least a turbine, your precious body cocooned in a survival suit and the cockpit bulging with the most modern nav kit. But there are some people who do it as a day job, in almost any type of aircraft, summer and winter, minimising the risks but accepting those that remain, and trusting to good engineering and their own skills to see them right.

One such is David Plange, whose Alpha2Bravo ferry company specialises in getting aeroplanes of all types from the New World to the Old or vice-versa at any time of year. David has so far made 22 crossings in light singles (and a couple in twins – a King Air and a Piper Cheyenne turbine) and has troubleshot his way through a selection of technical challenges without damaging an aircraft and without, he says, causing undue stress to himself. Like risk, stress it relative.

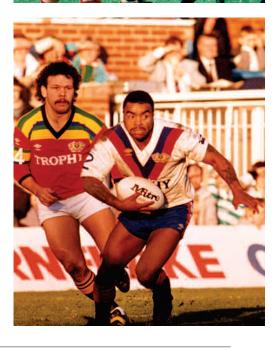
Rewards, too, are relative to risk. David's

favourite book is Ernie Gann's "Fate is the Hunter", which should be on every pilot's bookshelf - if it isn't on yours, you're in for a treat. Gann was a pioneer of those northern routes back in the forties, flying unreliable aeroplanes through ice and storm into the frozen unknown. He was also a writer of rare and special talent, and his evocations of solitude above the enchanted icefields must be read to be appreciated. The book will transport you vicariously to magical places you will probably never see; but David Plange read the book and determined to breathe the same air. And while the risks aren't what they were in Ernie Gann's day, it's all relative.

David's route to aviation was an unusual one. His father came to England from Ghana to study law and met his mother in Hull, where David was born and raised. He never made model aircraft or bought the spotter books, never raised his eyes to the sky to watch a plane putter by; his sights were set firmly on the ground. He

Top: David Plange today, with his feet safely on dry land at Sturgate Middle right: David about to score for Sheffield against Leigh at the height of his playing career Right: David in action for Great Britain against the Rest of the World in 1988





54 General Aviation April 2012

played rugby – the professional code, hard, brutal and uncompromising – from the tender age of ten.

"All I ever wanted to do was be a professional rugby player," David says. He made it, too – first with Doncaster, then seven years with Castleford, and three years with Sheffield Eagles. The highlights of his career included being on the winning side in the Challenge Cup Final at Wembley in 1986 and being capped for Great Britain in 1988, playing on the wing. But his great days came before the big-money era, and while rugby left him comfortably off it didn't make him rich. "Players earn a good enough living now," he says, "but I started as a part-timer with Doncaster and it was only ever for the love of the game."

When he stopped playing he took

at Gamston when he wasn't using it. "I did my IMC rating in the minimum time and went to Carlisle for a night rating. I started flying locally, but I soon outgrew that. You'd set off for the Humber Bridge and after 20 minutes you'd only be halfway there. I was soon looking for something faster, so we sold the Aerobat to the Club and I bought a TB-9 on my own. I liked the looks and the fact that it had three seats, and a better turn of speed."

David, then based at Sandtoft, found that the TB-9 brought Le Touquet and the Isle of Man within range, but after a year he traded up to a retractable Piper Arrow which happened to be on the Greek register and had to be picked up in Athens. "I flew the TB-9 up to Perth where it had been bought by a syndicate," says David.

not be because of something you've overlooked or left undone. Cover everything you possibly can, then you can fly with confidence."

David began flying around Europe with a friend whose business took him all over the Continent. They began looking for something even faster. "The dollar was two to one at that time so I thought it would be a good time to buy in the States and import through Denmark to settle the VAT issues," David says. "I went to the States and validated my licences and get an FAA IR, but then we ended up buying a Mooney 252 from Switzerland, on the Swiss register. We transferred it onto the N-register but only kept it for six months before we sold it to an airline pilot.

Catch 22

"By then I had my multi-engine rating and JAA CPL-IR. I can't say I excelled at school, quite the opposite, but I had no trouble with the theoretical knowledge requirements because I was interested and because there was a goal I wanted to achieve. Had there been more pressure to do well when I was younger, who knows, I may have performed better at school. Anyway, we went looking in the States for a Cirrus. We saw three or four, but in Kelso, Oregon we came across a 1998 Mooney Bravo which looked like a really good fit. So we bought that, and I decided to fly it home.

"Then I discovered the Catch 22 of ferry



flying, which is that if you haven't got five Atlantic crossings under your belt, you can't get insurance to cross. Given that if you can't get the insurance you can't get the crossings, that presents an obstacle. But I hadn't gone all that way not to fly my own aircraft back to England. The insurers were adamant that I should get a qualified ferry pilot to do it, but eventually I found one who would insure the flight if I had a ferry pilot in the right seat.

"I advertised for a pilot and got a lot of replies, but one stuck out – Dustin Rabe, who'd done a lot of crossings despite still being in his 20s. We hit it off straight away. Sometimes you just click with people, and he very quickly became a friend as well as a mentor." The story was that crossing was told in the October 2009 issue of *General Aviation* under the



Above: David on one of his early ferry flights with a Cessna C182 Right: Dustin Rabe (left) with David – he was killed on a ferry flight in the summer of 2010

coaching positions and started a successful wholesaling company. Aviation didn't intrude upon his life until he was 35 years old. "A friend of mine said one day he was going to ALH Skytrain at Gamston to take a flying lesson. He'd started a business which was doing quite well. Perhaps in the back of my mind I'd always fancied learning to fly, I don't know - but I went with him, had a lesson in a Katana and liked it. My instructor Tony Hather said I seemed to have a knack for it. I don't know if he says that to all the boys, but I felt very comfortable in the air. My friend and I started learning together, and it was a competitive thing; I've always had a strong competitive streak and I wanted to do as well as I possibly could. In the event, he fell behind - he was too busy, and he dropped out, didn't get his licence.

"I asked Tony how quickly his best-ever student had got through the course, and he pointed out it was a 45-hour minimum. So I asked how quickly his best student had been ready for his PPL skills test, and he said 30 hours. 'Don't even try, you'll never beat it,' he said. Well, talk about an incentive... I was ready for my GFT after 29 hours, and used the rest of the time to check out on different aircraft. By the time I got my licence I had six types in my book."

David bought a Cessna 152 Aerobat with a co-owner, leasing it back to the club

"One of them, Rob Swinney, who worked for John Smith's brewery, had only just got his licence but he was absolutely determined to come with me to Greece to pick up the Arrow. So we went out on easyJet and flew the Arrow back through Italy, Corsica and France. As far as flying experience goes we were babes in the wood and it was our longest trip by a long way, but we loved it."

David kept the Arrow for three years and his experience steadily increased. "I always had an apprehension about mountain flying," he says. "I knew I was missing the best scenery so I arranged to go to Basel and fly with a fantastic instructor called Isabella, who worked for the Swiss government in charge of airspace infringements around Geneva. We flew to Locarno on the Italian border, to San Moritz, Samedan, then back, and she taught me all about reading the mountain air, the 45-degree approaches to ridges, lenticular clouds, all the basics you need to feel confident in the mountains.

"Not to have done that would be against my flying philosophy. The idea must be that when something goes wrong, it must headline 'A one percent chance of survival', which sums up the fears of many pilots contemplating such a trip; in those frozen northern seas, far off the shipping routes, even the best survival gear will just drag out the inevitable. "The survival suit is largely a psychological prop," David says. "On one of my first crossings, I saw at Sondestrom a map on the wall with a red dot for every aircraft that had gone in, and believe me it was a rash of red dots from one side of the Atlantic to the other, and up onto the ice cap. Most of them were in the old days when navigation aids and aircraft were less reliable, but unfortunately losses are still a regular occurrence today."

Dustin Rabe initiated David into some of the real-world issues that attend ferry flying. "He told me the ferry industry was very cut-throat, and if people found out who you were working for they'd try to rob you of your customer," David says. "It never crossed my mind at that time that I could make a business of it. But the trip gave me a taste of what Ernie Gann was writing about, and by the end I was absolutely determined to do it again.

"Dustin was taking a lot of new Cessna 182s to Germany. He agreed to train me up to get the crossings I needed, so we did five trips together on 182s. Then we flew across in a pair of 182 turbos. I was on my own for the first time, flying seven miles behind Dustin, talking to him on the radio. I was at 17,000 feet and he was 19,000, and I could see his light... but even so, you feel more isolated than anyone else on the planet, and I liked that. You're conscious of how slowly the time passes... you think you see boats down below, but they're icebergs. Occasionally you talk to other ferry pilots, or airliners, get them to relay your position, but you can sometimes feel a very long way from anywhere. The flying can be challenging, too... on my first solo trip in the 182 I had to climb to 24,000 feet to get out of icing, and given that the 182 is only certificated to 20,000 feet, I was a test pilot..."

In his 23 crossings (at time of writing – he had two more scheduled before the end of 2011) David has had his share of 'moments', including a fuel system failure which rendered his ferry tank useless, leaving him with 300 miles to swim – he managed to get it going again – and an unfortunate tracker failure, following which his wife Caroline was informed of his death. "Difficult telephone conversation after that," says David. The couple have a three-year-old son, Bailey, and another on



the way. Caroline, a teacher, understands the risks. "We've flown together and she knows that I do everything possible to maximise my safety. You have to be vigilant and meticulous in your planning,

Diamond in the rough

t was, says David Plange, "not a nice situation to be in". Out over the icy Labrador Sea 130 nm from land, nursing a Diamond DA40 with a sick engine that was clattering like the devil's own blacksmith, steadily losing height and heading inexorably into a layer of overcast and icing... A quick mental calculation shows that at 75 knots and a descent rate of 600 fpm the aircraft is not going to make it, and the whole mindnumbing scenario is compounded by the fact that you have no idea what's gone wrong and you can't begin to troubleshoot.

It started as a ferry flight like any other, flying the single-

engined Diamond from Florida to Bratislava in the Czech Republic. David was due to be married the following weekend, so he was keen to push on, but the conditions were very good and the forecast was for tailwinds. He had climbed to 13,000 feet for the crossing to Greenland and everything was going swimmingly until...

"Suddenly there was a noise like somebody letting off a shotgun in the back seat," David says. "It banged away and the aircraft started to shake. No lever I touched made any difference. One of the cylinder head temperatures began to fall away... the Garmin 1000 showed I had 130 nm to run to Narsarssuak. I reported to Sondrestrom that I had a roughrunning engine and concentrated on finding the lowest possible rate of descent, which was about 600 fpm.

"Below me at around 7,000 feet was a layer of overcast where I knew I'd find ice, and I was trying to work out how I'd get through that when after about five minutes the shotgun blasts and the vibration stopped. There seemed to be no logical explanation... I maintained height and pressed on, but with 85 miles to run the noise and vibration came back with a vengeance and once again I was descending towards the sea. Fuel flow went from 8.6 gallons an hour to 14 gph on three cylinders and I was descending even faster than before, just above the stall, and this was an even worse situation to be in.

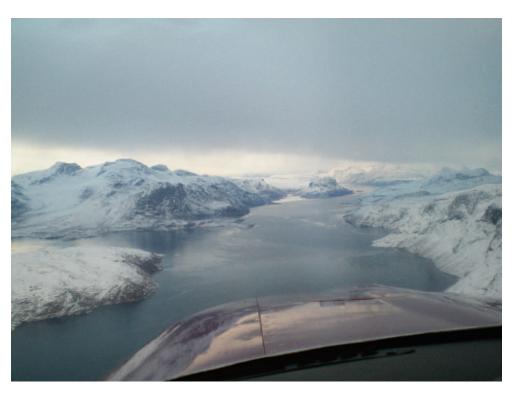
"Sondrestrom said they'd sent out a helicopter on a reciprocal heading and I struggled into my survival suit. So now I'm trying to fly with these unwieldy two-fingered gloves, like the alien claw I had to take my arm out to change radio frequencies. Then I was into the cloud layer, anxiously looking for ice accretion... I lost radio communication as the aerial iced up, but fortunately I came out at four and a half thousand carrying very little ice. Below the cloud you could see forever, as is often the case up there, so I could see Greenland but it wasn't getting bigger very fast. I did, however, see the helicopter on the G1000, which was quite some comfort.

"Then I found that in the denser air



Left: shaky MFD picture shows one pot has gone on strike

56 General Aviation April 2012



Far left: the immersion suit is largely a psychological prop as a sea rescue is improbable

Left: picking the correct fjord is vital – they're identical, and the wrong ones are dead ends Below: David has flown to 24,000 feet to get out of icing



make sure you've always got your options and ways out. I've sometimes been stuck in Bangor, Maine, for days with other pilots who were keen to go, and I've managed to dissuade them – you must not be short of

confidence, without being over-confident."

Nothing brought the risks home more forcefully than the death of Dustin Rabe, who was killed when a Comp Air 8 he was ferrying to Antwerp crashed on landing at

Mount Pleasant, South Carolina in July 2010. He was 29 years old. "It was a terrible blow," David says. "I was ferrying an aircraft to Bangkok at the time and I was so affected I thought I'd call the flight

the Diamond could maintain altitude, but the 30kt tailwind had gone to a 20kt headwind so fuel became a real problem. It was going to be very tight on range. I established two-way comms with the helicopter, then I saw her, a big red Sikorsky, and I began to think I might just get out of this.

"At 20 nm from the SI NDB they suggested I put the aircraft down next to the Narsarssuak helipad, 30 miles short of the airfield. A Seneca V had gone in there when it had run out of fuel, although that was down to pilot error as the forecast wind was 60 kt on the nose. But it

was just a small field – in effect they were offering that I crash the aircraft, with a relatively good chance for survival. I thought the situation wasn't getting any worse and I certainly didn't want to be associated with losing an aircraft if I could help it. It looked like I had the fuel to make the airfield, so I decided to press on and the helicopter followed me.

"Getting it back on the ground was uneventful, but it was extraordinarily peaceful when I shut down and the gunshots from the back stopped.

"Next day I found someone who was prepared to have a look at it for me, a guy calls Niels who was the head of maintenance there – he took out the plugs out and did a borescope inspection of the cylinders, and everything was fine. He took off the injectors and measured the fuel flow from each cylinder... and then checked the electric fuel pump, and the diaphragm had gone.

"When you're above 9,000 feet in the DA40 you have to switch on the electric fuel pump in case you get fuel vaporisation. Once it's airlocked, that's it – and in this case the electric pump



Left: Diamond awaits attention in an expensive hangar at Narsarssuak

had failed. There was no warning light to tell you... the aircraft was on its third electric fuel pump, which seemed a lot for a 2008 aircraft.

"My immediate problem was that I was stuck in Greenland and I was supposed to be getting married that Saturday. Everything was booked up because of the Easter holidays but Niels managed to get me a jump seat on a Dash 8 to Nuuk,

and from there I flew to Sondrestrom and then on to Copenhagen. I got home to Scunthorpe on Friday evening and got married next day.

"Now what about the DA40? A friend offered to go and get it for me but I wouldn't let him. How would I have felt if it had gone down with him in it? I really didn't want to get back in that plane, but I wasn't going to let anybody else do it. So I went from Manchester to Keflavik, got a bus to Rekjavik and flew to Narsarssuak, and the round trip cost me a fortune.

"The replacement pump had arrived and next day Neils and I put it on. Niels was an engineer of the old school – I saw how meticulous he was. It was like watching an artist or a surgeon, and I knew he wouldn't clear the aircraft for flight if he had any concerns about it. I took it for a flight – up to 13,000 feet and everything seemed fine... I landed and refuelled, then planned a route to Kulusuk on the west coast of Greenland, then on to Keflakiv, Wick and Bratislava, and the engine never missed a beat."

General Aviation April 2012 57

off, but I went ahead. It reinforces the message that however diligent you are, you can't be careful enough. Dustin had done 20 hours of dual on the aircraft before starting the ferry flight. He was actually on the ground when it started to wiggle and he tried to take off again to avoid damage to the aircraft. Then it rolled in."

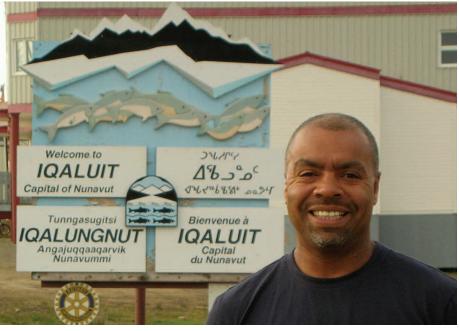
It's not a job for life. At time of writing David had completed 23 crossings and had two more booked, and he'd looking to progress onto something else. "When I've done 25 crossings I'll consider that I've paid my dues," he says. "I prefer flying turbine aircraft now – apart from the extra confidence they give you, you get across in half the time. I've ferried three Cessna Caravans and a PA-31T and I've sat with a company pilot on a King Air 350, and when you've done that, it's hard to get back into a 182 and do it.

"The rewards are certainly not financial. On one crossing that sticks in my mind, from leaving Canada to arriving in the UK I never saw land or sea except on approach. But often the scenery is out of this world. The icy seascapes, the mountains and icefields of Greenland, the northern lights, and you can enjoy these breathtaking sights in solitude... you can read the book, but you have to go there to know."

After 12 years in the air David has some 1,500 hours, has just completed his FAA ATP and is working on his JAA ATPL. He has sold his own aircraft and won't be buying again until the uncertainties surrounding EASA, and in particular its plans for the N-register, have become clearer. These uncertainties also impinge

Top right: beautiful but deadly, the mountains of Greenland are enchanting in good weather Right: ferry flying takes a pilot to out-of-theway places like Iqaluit in northern Canada Below: the airfield at Narsarssuak is one-way because you can't outclimb the mountain







on the ferrying industry, with a lot of people waiting to see how things play out. "Aircraft are a lot cheaper in America, but now the Danish door has closed and you have to pay an extra 20 percent VAT the traffic has been depressed; that, coupled with the fact that nobody knows what EASA is going to do, has given a horrendous knock to the European dealers."

But that's not the only reason he'd discourage pilots from thinking about ferrying. "I get a lot of people applying, and I have to say to them, I would not put you in this kind of environment... it's not a job for a low-hours pilot. This is the most unforgiving territory in the world. You need a minimum 1,000 hours, and you shouldn't look on it as a stepping stone to a commercial career. It's so specialised, and so far removed from the day-to-day requirements of normal commercial flying, that you can't really say that one prepares you for the other."

58 General Aviation April 2012