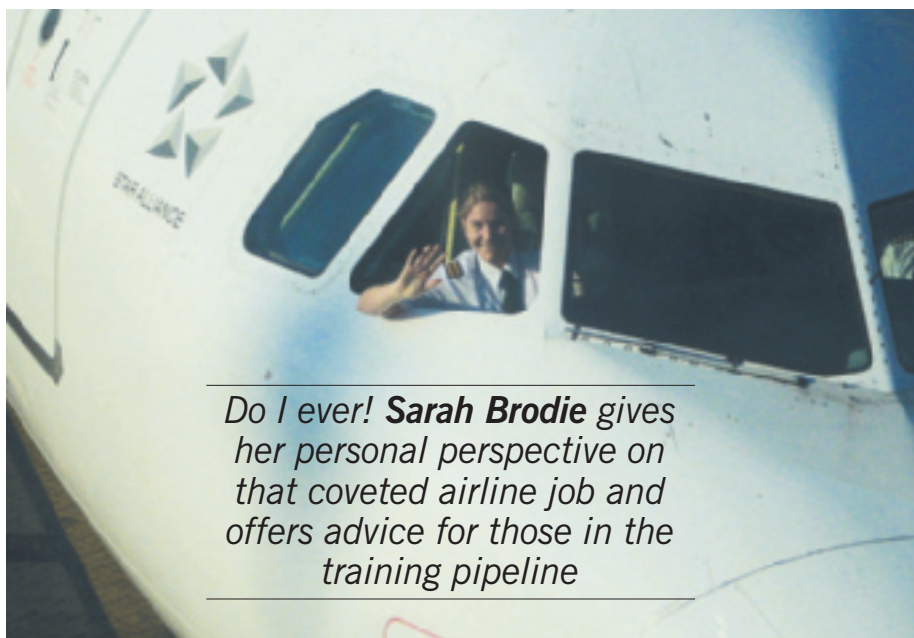


Do I love my job?



Do I ever! Sarah Brodie gives her personal perspective on that coveted airline job and offers advice for those in the training pipeline



Top: Airbus A320, Sarah Brodie's first jet
Above left: window on the world - Sarah parks the Airbus in Dublin
Above: at last, Sarah finally gets to wear her First Officer's uniform

Soon after obtaining my frozen ATPL I wrote an article for this magazine describing my modular training. I have now been based at Heathrow on the Airbus 320 family for a year and a half. As a follow-up to my initial ATPL training article, but especially for any aspiring airline pilots who are interested in where their careers might be heading, I would like to share some of my experiences and hopefully give an insight into what is involved in flying the line for one of the UK's leading scheduled airlines.

The Airbus 320 family is my first jet type rating. I am always going to have a soft spot for it, but without bias there is no denying that the Airbus is an awesome piece of kit made unique by the clever Electronic Centralized Aircraft Monitoring (ECAM) system, flight protection systems, system redundancy and the renowned fly-by-wire with side-stick design that helps make the flight deck a spacious, comfortable and convenient work environment. However, before I got settled into the right hand seat I had to get through a type rating, and also secure a job.

The type rating begins with ground school,

where computer-based training covers aircraft principles, systems and performance. This was an intense few weeks, finishing with technical and performance tests. After ground school comes two sessions in a fixed based trainer, then 12 four-hour sessions in the full motion simulator, each with a two hour pre-sim and post-sim briefing. Two pilots and a type rating instructor are needed to complete a sim session. I was lucky enough to do my rating with a former BAe146 captain, which gave me the opportunity to learn from his experience and do all my sessions in the right hand seat. Thank you, Captain Grainger!

The fixed based trainer offers the first chance to have a detailed look at the layout of the flight deck and to run through the checklists in real time. Flows or cockpit scans are introduced in the Multi Crew Coordination (MCC) course, which is part of the ATPL. It doesn't matter if you've done an MCC course in a Boeing or an Airbus, the basic principles apply to anything and like everything in aviation it's all about being prepared. Before I got to my simulator sessions I stuck some Airbus-issued cockpit panel posters on a wall

at home with a chair in front of them, and visualised the cockpit safety scan, the start-up sequence and the basics of Airbus flying.

The Airbus operates in modes – for example, heading (HDG) or navigation (NAV) mode. Heading mode literally means the aircraft is flying a pilot-selected heading and navigation mode means the aircraft is following the Flight Management Guidance System (FMGS) pre-programmed route. Programming of the FMGS is done on the ground by the pilots. Either 'HDG' or 'NAV' would be displayed on the Flight Mode Annunciator (FMA). Other examples are Descent mode (DES) or Vertical Speed Mode (V/S). The FMA is the absolute key to flying the Airbus. It shows at all times exactly what mode of flight the aeroplane is in and is a confirmation of the pilot flying's actions. It is highly valuable before going in for



Above: side-stick helps make the A320 flight deck spacious, comfortable and convenient
Left: welcome to my workbench - Sarah in the right seat
Right: A320 thrust levers - asymmetric flying calls for a bootful of rudder

Quite simply; aviate, navigate, and communicate. Throughout my training I have always tried to keep the big picture at the front of my mind and not be distracted by anything trivial.

With the simulator sessions complete it was time for a Licence Skills Test (LST) and operators or company proficiency check (OPC) followed by base training. The LST is an examination of general instrument and flying skills in a multi-crew and aircraft-specific environment. It's usually completed over two four-hour sessions and will cover engine failures after take-off, altimetry discipline, non precision and ILS approaches with Traffic Alert and Warning System (TCAS), Wind Shear and Ground Proximity Warning System (GPWS) memory responses.

It is a licence requirement to do six landings without passengers before being let loose on transporting the general public. This base training is done with a training captain and a safety pilot and for me it was fantastic fun. Taking a near empty Airbus around the circuit a few times with the mixture of excitement, sense of achievement, adrenaline and apprehension was like doing my first solo all over again multiplied by a factor of ten.

Flying the Airbus for the first time, I could not believe how realistic the simulator had felt. I just trusted what I had learnt from my training while adjusting the perspective I'd got used to from the simulator's computer-generated screen to the fuller picture of the

cockpit window and the real-life perspective outside. I didn't know for certain until my first touch-down exactly how it was going to feel and appreciated my training captain's little coaching tips – constant rate of descent, look to the end of the runway etc.

With the base training box ticked and my confidence flying high, the next step was to do the inevitable first flight with passengers. That's like doing your first solo multiplied by twenty! Looking back now, I'm afraid to say that the only reason I can tell you that my first operational or line training flight was to Glasgow is because I have just looked it up in my logbook.

I've now flown so many sectors they have all merged into one big memory in my mind with certain 'wow' moments or comedy occasions that stand out. What I do remember of my first operational flight is who the training captain was, that I was the pilot not flying for the first three sectors and the last sector of that day was my first professional airliner night landing into London Heathrow, which incidentally was a good one. I can remember it very well, including someone yelling 'flare!'

My company requires sixty sectors of line training or Line Flying Under Supervision (LFUS) with the last four sectors consisting of a line check. This stage of training focuses on the everyday operations of airline flying. On occasion you can find yourself a little weary from the intensity of line training, but mainly I found those first few weeks so exciting. Meeting and working with cabin crew, talking to ATC and using the windscreen wipers for the first time – which I found hilarious, I was sure they had been lifted from a Mini!



the simulator sessions to run through what you would expect the FMA, Primary Flight Display and Navigation Display to be showing at certain points of flight. A basic simulation program on your home computer is a great way to initially familiarise yourself with basic Airbus operating techniques.

The full motion simulator sessions started with basic handling and visual circuits and progresses through basic ILS's, engine failures and system failures in flight situations.

If I had a penny for everyone who said to me 'Know your engine failure after take-off profile,' I would be rich. Practice EFATOs are fundamental to simulator sessions. What surprised me about the 'computerised' Airbus is the bootful of rudder required if an engine goes. Conventional flying techniques are still needed.

Simulator training relies on good situational awareness in every area, by which I mean containing the problem while flying the aircraft safely, knowing where you want to fly to – for example, diverting to a more suitable airport – and finally, informing the relevant people, air traffic control, cabin crew and passengers.

Once I got to the end of my line training I really felt like I had made it, although the nature of the job is that the training is never over and really it was only the beginning. Get ready for staying up to date with company memos, six monthly simulator checks, annual line checks and medicals, maybe another type rating or two and hopefully at some stage command training.

For now I am feeling content. All my training has been worth it, and I have picked a near perfect job for me, it's great. No two days are the same. I get to work and meet with different people from all walks of life whilst getting to practice what I've trained for every day. It's random and varied. Weather and performance can present some interesting scenarios which may require some last-minute decision making.

The heaviest plane I have flown was an A321 which was over eighty thousand



Left: night stop in Aleppo, Syria, where women pilots are rare
Below: view from the office window - this happens to be in the hold over London
Right: the view from final approach into Jersey is pretty special



kilograms. My longest flight is currently Tehran to London, which took six hours and fifty one minutes. My shortest scheduled flight which was London to Manchester, 41 minutes.

The questions I get asked the most about my job are: where is your favourite place, isn't it boring as you don't really fly it, and (if I'm talking to a fellow female) what's it like to be a woman working as an airline pilot – it's still a man's world, isn't it? None of the questions can be answered easily but they all make me smile. Basically, flying is addictive, and every time I think I've seen something awe-inspiring I go on to see something equally or more amazing. For me at the moment my favourite place to do an approach and landing is London Heathrow. The views over central London at any time of day are just out of this world, I will never tire of it. The air traffic service considering the amount of traffic is fantastic and I get to see massive planes like



the Jumbos and A380s. For obvious reasons not every flight deck member is happy about the hustle and bustle of Heathrow, which does have its well publicised problems at the moment.

I also find it really amusing flying the full Compton departure from London at 6,000 feet when I used to potter about in a PA28 in the same area before I'd even got a CPL. At the time I didn't appreciate quite how close the big jets were to me. I think the views into Jersey, Inverness, Naples and some of the Greek Islands are all pretty special, as is the spectacle of cruising over night time Africa (the night sky can be crystal clear) and the Sahara desert meeting the Atlantic Ocean in the daytime.

As I do more flights other things have become more important to me. For example, there are a few airports in the world where I know the turnaround is going to run smoothly with the help of the ground staff. I landed into a German airport recently and they had Porches for their follow-me cars, pretty cool. There are other places where I know I am going to have a lot to do when I land, such as de-icing in the winter months in Moscow. With four to five hour flying sectors either side this can make for a hectic day.

For a night stop I must admit I enjoy going to Amsterdam. I find the place where we stay, its surroundings and the people very pleasant. A short haul night stop is either early or late. An early report at London of 0500 with three sectors arriving in Amsterdam at around 1400 before reporting the next day in Amsterdam at 0500. There is just enough time to go out on a bike or into town enjoy a meal with the crew before going to sleep ready for the next day flying. Late shifts report about 1400, arrive in



and legal knowledge – what happens if the lights on the runway go out or if the visibility is lower than expected? Can we carry on the approach?

As for being a woman doing a traditionally male dominated job, well... it's been interesting. With regard to the UK and other western countries, ladies have been accepted in the profession for many years, and in recent years airlines have been recruiting lady pilots more positively so the overall numbers are getting higher. Yet we ladies are still a minority, particularly those of us who have a command. Lady pilots only make up about ten percent of the pilot workforce. In countries such as Syria, where most women don't even drive, I am pretty unique.

Working on the line, the girls that make up the cabin crew tend to even things out. In fact I have had many trips where the only male on the team has been the captain. But with regards to flight deck I think that it will be many years, if ever, before the numbers from first officers to pilot managers get anywhere near a fifty-fifty ratio. There are no pink books on aeroplanes for girls aged five. Many women in their mid twenties who are capable of flying for a living and have been exposed to flying in their later years will probably think about settling down instead of being away from home and taking on the huge financial commitment and rigours of flight training.

In practice I don't think it makes much of a difference to doing the job. Adjusting to the

Left: the views over central London at any time of day are just out of this world
Bottom: pilot's-eye view of my favourite airport, Heathrow

Amsterdam at around 2200 and report the next day at 1400. Again, just enough time for breakfast and a bike ride.

The mid-haul/long haul routes mean that you can be down route for five nights at a time. Sometimes there are shuttle flights in that time, for example in Amman, Jordan, our second day down route is a night shuttle to Addis Abba in Ethiopia. On other trips I might get three clear days off down route. Depending on where you are and whether it suits your taste, this can be a good or a bad thing. It's not necessarily all glamour! On the whole I feel extremely privileged to have had the chance to visit some very random parts of the world.

I guess the last few paragraphs show my response to the accusation that it's a boring job flown on autopilot. I don't think the job is

boring, and personally I seem to do a lot of manual flying. Yes we do engage the autopilot in the climb. The initial climb can be a busy time so using the autopilot prevents us from becoming overloaded with frequency changes, staying alert to other traffic flying the departure or taking a heading change and confirming cleared levels and altimeter settings, all of which can happen in less than half a minute.

Every take off is done manually, and so far I have only executed five autolands, two of those in actual Cat III conditions. If we do need to autoland there are many things that we need to be alert to on the approach. The autopilot is like a third person to us. Again it is a very busy time, and we need to be scanning and going through numerous checks on the way down. It is a time for practicing technical

many different personalities every time you turn up to work, although fun, can take a bit of effort, whether male or female. I have been exposed to countless situations and what I have found is it is best to be thick-skinned and immune to idiosyncrasies. Even if the job becomes further automated the traditions of aviation, such as having a captain and a chain of command, along with the type of people who take up the profession, I don't think will ever change.

As far as finding employment goes there is always an element of luck involved. Pilot recruitment is cyclical and is affected by the seasons and the economy. Flying is busiest in the UK in summer with people going on holiday, and that is when the most pilots are needed. The economy affects the long term recruitment goals of an airline. At the moment due to the rising price of oil and delays of specific aircraft deliveries, airlines in Europe and America are slowing up on recruitment. The biggest developments are happening in Asia, where there is a shortage of experienced pilots.

If you are looking for a job, stick at it, stay positive and be prepared to be patient. If you can't find a job immediately as an airline pilot, try to get work experience in any type of aviation environment from flying instructing to despatching. Keep your licence current, keep applying and keep practicing your interview techniques. Remember everyone has to start somewhere. I recently flew as a passenger on the A380 and chatted to the captain at the end of the flight. He had the most experience of flying the aircraft out of all the crew, which turned out to be ninety hours. An even better thought for you; there was a time in his career when he only had two hundred total hours in his log book! Good luck. □

