

Arctic Airline

First Airline Job for me

You too can be an airline pilot!

All right, you have finally made it there. After years of flight instruction at McWages, several sleepless years living on a pager doing charters and hundreds of applications, you have been hired by a Real Airline. That is, one that flies planes with "Boeing" written on the data plate. Ignore the fact that the Boeing 727 is older than you are and concentrate next on getting through the training and line indoctrination. During this probation and training period, the company can fire you for coughing in front of the captain, so listen up, otherwise all the previous effort will come to nothing.

First, you need to get through the ground school, which should be no problem if you can memorize a telephone book of numbers. Just do it. Every night, study. One guy in our class failed a test because he liked to go out for a beer or five. Do not go out for five beers, at least not during ground school. Another guy dropped out because he just had a new daughter born and he wanted to spend time with her. Then he failed some tests for lack of sleep. Well, where are your priorities? The company provided hotels for us to stay in; he could have forsaken his family and slept there. Do not have children while attending ground school. You are expected to dedicate your life to the cram school, jamming in all the numbers and procedures you can. There is too much to learn in the time available, even with total dedication, so you have to content yourself with the essentials to pass. The airplane is just another airplane, a bigger version of a business jet, but the procedures have to be learned as if they were commandments from God, who in this case is personified by the chief pilot, who has power to wash you out of training before the expensive simulator starts. Our chief pilot was a great man, honest to a fault and hard working. You would really have to show bad judgment to get on his bad side. Just as in all walks of life, at an airline, there will be some people who appeal to you, and others who are challenging. I was lucky to meet many at my first airline who were excellent.

Study hard, because a lot of airlines decide who from the class goes to simulator first based on ground school exam marks. This means you are "on line" flying first, which means a lower seniority number, which determines who could be promoted first (or fired last, in our airlines' case).

During ground school, before going down to the simulator at \$1000/hour, we were allowed to sit inside an old cockpit mockup with a few lights that blinked. Depending on your airline, you might be sitting in a cardboard box painted to look like a cockpit. There, you are trained a couple of times to go through some checklists. In our case this training seemed to rush by too quickly, resulting in some students spending more of the \$1000/hour training. If you get lucky and are hired on some kind of modern airliner, you may have the utter privilege of being able to train as much as you wish on a

computerized cockpit procedures trainer. In our case, when we asked to go in to the old wrecked cockpit on our own time to practice together, we were told we could not, since the old cockpit with blinking lights "might get broken". Well, what is the cockpit procedures trainer for if not for training pilots? A place for the cargo guys (they hire entry level pilots) to smoke dope and make airplane noises? If this is your case as well, the best that can be done is to go over the checklists with the other candidates at night. You will need to know the emergency procedures by heart down at the simulator, where there is no time to actually teach you anything in much detail. After all, after going to the simulator for 4 hours, with the briefing, breaks and transit times there and back, the evenings just have enough time for dinner, a walk and a swim in the hotel pool before bed. Going over books until the middle of the night is probably just going to make your performance worse the next day. Some short review on the most important points mentioned by the instructor is probably the best compromise.

In a flash, if you did well on your tests and Allah is with you, you will be shot off to simulator right after ground school. Or, if you did less well, or the simulator is broken, or the senior instructors are all busy, or if some terrorists crashed some planes somewhere in the country where your simulator is based, you could end up sitting around for weeks waiting for the simulator and instructors to be free for you. It is usually not a problem of simulator availability. The problem is getting instructors from your airline, especially from smaller airlines, where instructors are just line pilots forced, kicking and screaming, to teach in the simulator. At airlines where simulator instructors are paid more than a nickel a day extra to spend time in a simulator at 3 a.m., the attitude towards being an instructor should be, perhaps, a little more positive. Some pilots might even volunteer to be instructors if the pay was a little more than flying and there were some advantages given to taking the position.

You might think that if instructors are in such short supply, that a contract instructor could be brought in. For example, a retired or medically grounded pilot from some airline with an exemplary safety record who actually enjoys teaching might make a good instructor. There is a problem though: on line, you may fly with a different crew every flight for two months before getting a repeat. Communications must be standard, as must procedures. Unfortunately, there is no completely standard worldwide technique to flying a Boeing aircraft. The best approximation is the flight operations manual put out by Boeing, but every company and culture feels a powerful pressure to modify the factory suggestions because people are different. So, every airline has slightly different callouts and checklists. Any contract instructor brought in would have to know the checklists and callouts of your particular airline. A contract instructor might pollute the minds of the impressionable new hires with someone else's callouts. First lessons are almost unshakeable, so it would create all kinds of unlearning problems later on when you give what you think is an appropriate call and look over into the quizzical faces of your crewmembers. So, you will most likely wait for an instructor from your own airline.

Use the time! Study, study, study! Pretend you are a crew and study with some other keen guy just like you. There are several telephone size books to learn over the years; try to get as much as you can learned before simulator starts, because down there, there will be precious little time between the sessions to do much study. Being prepared also lessens the humiliation of your first few simulator sessions.

Down at simulator, as an experienced pilot, you can expect to be given all the respect a

new recruit gets at the United States marine boot camp. Just joking. Actually, like most things in life, your experience depends on who the people are. For us, simulator training started with a senior instructor giving a little speech along the lines of "if you think I am arrogant, aloof or harsh, like other students complained about, this is not true...I am here to help you; you are not here to help me". Ten minutes later, in response to a technical question, he gave a blank stare and said "You tell me. Both of you guys look it up, write it down and bring it back to me tomorrow." This kind of inhibited the questioning minds among us. During simulator training, it seemed like there was not much time to practice things. Instruction and complicated explanations generally took place during high workload times-say, during the intercept for a precision instrument approach. To make your life easier, here is some advice: know the basics of instrument flying before going to the simulator. Buy Microsoft flight simulator and practice non-precision and precision approaches until they are second nature. If you mess up the basics down at the simulator, there will be correction of basic instrument technique coming from the back of the simulator as well as specific tips on the aircraft, which results in information overload.

I know how to make any pilot mess up maneuvers in the simulator. "Help" him the whole time. Talk constantly as he is trying to concentrate. His attention will be so divided and diverted that he will be sure to mess up something, especially if this is his first try at something in a new aircraft type. Remember that most of the airline instructors are not necessarily career flight instructors, so they may not know the recommended technique of correcting a few major points at a time, then working on the details when the major points are satisfactory. Prepare the best you can, because there will be humbling moments at simulator.

The Boeing in-range checklist has a little horizontal dashed line (-----) on it, where it is traditional to pause and set up the navigation aids for the approach, then ask the flight engineer to "go below the line". One day, during the approach, I asked for the flight engineer to "go below the line" after we were interrupted on our checklist. But we were NOT on the checklist that had the little dashed line. Our instructor said "if you do not know that there is no dotted line on this checklist, we may as well shut the simulator down and all go home". I felt bad. I had studied hard at ground school. In fact, my marks were the highest in the class. Now the instructor seemed to think I had made a serious and grave error, possibly endangering the lives of all aboard. Now, let us step back a bit and think about this. I was brand new to the company and to Boeing aircraft; with three crew members, the engineer always read the checklist, not me, and there were no immediate threats to safety by the engineer saying "oh, no, the line is on the other checklist". The point is, during initial simulator training, you will make mistakes. Try not to let one instructors' comments start you thinking negative. Wait for three instructors to say you are hopeless, then start thinking negative and go home.

Just joking. Actually, try not to ever think negative. The technical skills should come with time, but how much you enjoy the experience really depends on your attitude. You are trapped in a confined space for hours on end with all different kinds of people, so you may as well get along. Who wants to sit beside and listen to a negative person? There was nothing unusual about my simulator experience. A bunch of the other guys needed extra simulator training, so their experiences must have been more stressful than mine. After being to simulator, one new hire told me he was thinking about going back to university to get his diploma to teach high school. Another pilot, from the countryside in Greece, said simulator training always made him think about a career herding goats.

Think positive! The whole experience can change with a change of crew.

And then...like flying from a cumulus cloud out into the clear and smooth air; the first instructor left. The new instructor was relaxed, not tense or aggressive. He stopped the simulator for complicated explanations. He treated the students with respect as fellow professionals. He encouraged questions, answered them simply, and on occasion used humor, but not at the student's expense. My respect for this man was such that I promised myself that if and when I became a simulator instructor, I would follow his habits. Your simulator training experience depends to a great extent on who you have as an instructor. Regardless of who you have as an instructor, though, he will be gone before you know it.

After five tries in the simulator-much too fast-the flight test on the 6th try. It costs about \$1000/hr to have everyone down at simulator, on salary and in hotels, so companies want to minimize the training time. When someone can not pass the check ride, the schedule is messed up and much more instruction and money must be invested after the candidate is sent home to forget his training for a couple of weeks. Personally, I thought that it would be cheaper to do it right the first time; in other words, plan to train a little longer. Sure, I passed my simulator ride, but my partner needed more time. I would have been much better with another couple of sessions as well, even though I got the recommend immediately. Somewhere in there I guess we should also consider the safety of the passengers in the event of an emergency sometime on the newly-typed pilots first flights.

The simulator check ride itself is basic: a couple of approaches, one precision, one non precision, probably with some of the engines failed or the hydraulics out. A rapid depressurization is coming after any high altitude flight. A circling non precision approach at night followed by a missed approach at 50 feet to a non standard holding pattern is thrown in for variety. In an old plane like the 727 with a lousy autopilot and a pitch sensitive simulator circa 1970, is most likely that your initial check ride flight will not be perfect. Anyway, you stumble your way through it, think that everything was awful, then the examiner compliments you and gives you your type rating.

Well, almost a type rating. If you have never flown a similar type of big jet before, you will have the privilege of taking up a big empty airliner for 3 circuits, each one costing thousands of dollars just for you to fulfill a legal requirement of having done three take offs and landings. After being cancelled three times due to freezing rain and aircraft unavailability, the great day arrived for my simulator partner and I to go up. We went from Ottawa to Mirabel, the big, empty airport the government built to try and keep the province of Quebec from separating. Mirabel is a wonderful airport, but because somewhere in the planning, someone forgot to close Montreal's Dorval airport, which is practically downtown, Montreal's Mirabel airport remains empty at 60 km out of town. Perfect for a few circuits in a Boeing! After the simulator, the aircraft was actually easy. It was a 727-100 series, so all our landings went fine; no bounces or hard arrivals. This changes once you try out a 727-200 series, but that comes later. A final landing back at Ottawa, and-ta-dah!-you are an airline pilot. Maybe.

You think you have a job now? Think again. This is just the beginning of line indoctrination, which is about 25 flights on the line, where the captain shows you the operation and lets you fly a leg here and there. Good captains say little, other captains

help out with advice all the time, sometimes while the copilot is trying to concentrate flying. To make the first officer perform well, good captains brief during the cruise portion of the flight, then remain silent on the descent expect for gross errors. Even then, the best captains say only the words needed to get back on profile. The speeches and explanations are saved for after the flight. Some line captains were great instructors. Most of the very best teachers made it a point to avoid the training department. I guess they liked flying too much to spend time in the back of a simulator. Maybe the extra \$20 a day was not enough incentive to spend time in the bowels of a building that looks like the bunker that Hitler died in. (simulator buildings have to be ultra-steady, usually half-buried)

It seems like a person's suitability for being a crew member is more a function of personality than it is of position. One management pilot I flew with was a great crew member- respectful, open to communication and silent except for pertinent communications below 10000 feet. So, in my experience, one can not generalize about management pilots or training pilots. In spite of dire warnings from some crew about management pilots being both out of practice and out of touch, I found some of them are great crew members. Some captains, you may find more trying. Remember, think positive! Maybe they think you are an idiot and you are making their day difficult.

This whole airline pilot business is all about getting along with other people. It does not take a genius to move the controls around. NASA taught monkeys to fly spacecraft, did they not? You will find that there are standard operating procedures, which are necessary to follow so that you can fly with a crew that you have never met before. But there is also technique, and it changes from crew to crew. This means that what is perfect for one captain is upsetting to another. Do not despair. Seeing how different captains fly will give you a window on the many different ways there are to solve flying problems, be they weather, tight fuel or even flight attendant hysterics. You will learn— unless your bad attitude keeps you from learning.

Just do your best. Keep trying until the company throws you out. If you generally like other people, you will learn to see the logic of some of the patterns of behavior that, at first glance, seem illogical. For example, the captains who go back to the cargo compartment in cruise to "check the smoke detectors" with no payload on board are not crazy. They are hardcore smokers who need a fix. The captain who starts screaming obscenities at the window for no apparent reason is not upset with you; the aircraft is simply passing over the town where his ex-wife lives. There is a reason for every kind of behavior, even if that reason is that someone's mother never loved them, or that their father rejected them at a baseball game when they were 10 years old. Attempt to sympathize and see things from the captains point of view. Maybe it was a particularly nasty divorce that drove him over the edge.

Some of the more fun parts of line indoctrination are the skill testing questions and scenario developments. For example, in cruise flight:

Captain: "What would you do if the windshield cracked right now?".

First Officer: -Call for the window failure emergency checklist, of course. No action is required if it is an outer pane, just notify maintenance via the logbook and limit the pressure differential according to the checklist.

"All right, let us say that the crack gets bigger and pressurization is lost. Then what?"

-Call for the Rapid depressurization drill, which is oxygen mask on, check 100%, crew communications establish, tell the passengers to return to their seats...

"No control of cabin pressurization!"

-Emergency descent drill, thrust levers closed, speed brake extend, autopilot off, gear down for the low speed descent.

"Good. Now, the window blows out and sucks the captain out of his seat. He hits and passes through the number one engine, which starts to surge violently."

-Engine failure drill, engine number 1. Thrust lever 1 close, confirm, start lever 1 close, confirm...

"Engine number 1 explodes! Parts of it fly into engine number 2 and make it catch fire! What are you going to do right now? Tell me now! Hurry up!"

Since the captain is practically foaming at the mouth by this point, the first instinct is to call for the engine fire drill for engine number 2, which shuts down the engine. However, in this case, you have to stop and think. Engines 1 and 2 have the "A" system hydraulic pumps. Engine 3 does not have an engine driven hydraulic pump. You are in the middle of an emergency descent with speed brake and landing gear down (not that Boeing says to put the gear down, but the company does). If you shut down engines 1 and 2, you can not retract the gear or spoilers at the bottom of the emergency descent. With only one engine left, you can not stop the descent. So the correct response is to retract gear and speed brake first, then call for Engine Fire Drill, engine number 2. Of course, the captain is just acting out to see if you will do things without thinking.

The captain was impressed when I got this question right. How did I know it? Simple. I talked to other first officers and we shared the favorite questions of each captain. So, there is a secret: Cooperate with your fellow first officers. You will look really smart compared to the poor loner who has to think things out for himself. A side benefit is that you keep your sanity. After all, if Captain C says that your approaches are lousy and you think they are fine, it is useful to have a sanity check. If Captain C says the same thing to each of the other five first officers you talk to, either you all have the same problem or Captain C just has his own favorite topics.

After a couple of months of occasional flying and occasional improvement, the day arrives for your line check. This is just another flight where you do some of the flying legs and some of the non-flying duties while someone sitting in the jump seat asks you some airplane questions. If the check pilot likes you and you do not break any rules, you pass. The only new first officers who failed line indoctrination that I knew of were the ones who showed a lack of respect for some captains. After the line check, the questions during flying ease off. As far as most of the first officers can see, their flying has a slow general improvement with or without correction, but after the line check, there is less talk, allowing for more concentration.

Our airline was the airline of Nunavut, Canada's Arctic province, so I naturally assumed

that I would be flying the arctic constantly. This called for hundreds of dollars of investment in arctic clothing: parkas, snow boots, and polar bear repellent. Then the company got a freight contract in Europe and I spent a year commuting to our base in Copenhagen, Denmark. From Copenhagen, we would do short flights to Gotenburgh, where everyone is blond, beautiful and almost as tall as me, or England, where it is always raining, or Ireland, where it is also raining, but it makes a really pretty green color to the land. Irish girls are not as beautiful as the Danish, at least in the sense of being models, but they dress really sleazy, so the end result works out all right. Same with the English girls-not blond beauties, but so friendly that it does not really matter. In Germany, the girls are again blond and beautiful, even if a little crazy, and it is not raining all the time, so you can visit some topless beaches. I did not need my arctic clothes on these tours. However, then the freight contract vanished. Whoops! Back up to the arctic.

Flying in the arctic in winter is actually quite easy. It sounds bad, but that is only if you stay on the ground and freeze up. There are no icing problems since it is so cold. At -40 C, any moisture in the air has long since sublimed to snow, of which there is not much in the high arctic. The arctic is a desert; snow actually squeaks like baking powder when you walk on it. During the winter, there is no day; that is, the night lasts for a few months, depending on latitude. As you fly north from Ottawa, the sun sets to the south, casting long shadows over a landscape of snow and sea ice, as barren as the surface of the moon. The local people cope with their seasonal depression by using alcohol and drugs. The night air is clear and clean with no towns for thousands of kilometers, so clean, in fact, that the lights of Resolute Bay, for example, can be seen from over 150 nautical miles away, assuming you are near 40 000 feet. Even with a full moon, it is impossible to tell where the ocean begins and the land ends, since everything is gray snow, with no trees for thousands of kilometers. The magnetic compass is useless, since the North magnetic pole is so close by. Beyond the dual GPS installations, we did star shots to determine true heading. The astrocompass is surprisingly accurate at times, but with communities separated by thousands of kilometers and nothing else between except snow and rocks, I wonder how the old pilots did it without area navigation.

Flying in the other arctic season-"not winter"-is more challenging, since the temperatures are around freezing and there is some moisture in the air. This creates all kinds of rapidly changing conditions, including slushy runways that caused one of our 727's to slide off the runway in a strong crosswind. Due to the long distances between suitable airports in the arctic, many of these approaches had to be completed on the first try, otherwise we had to proceed to our alternate immediately. For example, the capital city of Nunavut, Iqaluit, often had Sonderstrominfjord in Greenland as an alternate. With a few extra hours of fuel on board for the alternate, it is no wonder that tickets in the arctic cost thousands of dollars while going to Europe cost hundreds. There are rewards to Arctic travel, though. During the brief thaw, the colors of the rocks come out-the area around Nanasivik is like the surface of Mars, where the minerals create all kinds of vibrant reddish hues. Baffin island looked so much like another world that NASA trained astronauts and tested equipment there. Watching the glaciers and icebergs breaking apart was a show all in itself. It was a privilege to visit such places and see things that others would never see, simply because of the cost of travel to these remote places.

All too soon, it is time for your six month simulator recurrent session. It seems like no

time at all, especially since recurrent simulator is only two sessions of practice, then the check ride flight. After five check rides in the 727 simulator, I was still stressed before the ride, but starting to feel more comfortable in the aircraft. Out on the line, it was almost routine, but never on the same comfort level as jumping into the Cessna Caravan. It is not that kind of simple aircraft. All the procedures and landings were consistent, though. But that was all rendered irrelevant. Myself and 30 other pilots were laid off just before Christmas, when the contracts for freight took a dip. Poof! Gone!

Say, want some free advice? Try hard to get through all the obstacles of an airline training program. Have some fun, though, after your years of little planes and living on pagers. After all, the airline job may not last long. It may be over before you know it.