

Case Study - The plane spotter

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The Cargo Airport Tower

It was a grey misty and cold November day. The wind was from the north, the clouds almost touched the pine trees, in a soft woolly way. Gina was sitting by herself in the old, very old, tower. It needed updated equipment; the whole airport needed an overhaul.

It was the anniversary of her move to the cargo airport, three years to the day. Following her graduation from the ATC Academy some eight years back, she had worked at one of the airports in the very north and had hated it! She hated the cold blistering weather, hated the snow, almost started hating herself for the life she lived.

She liked her new job, although the working conditions were different. They could be simply summarised in one sentence: "No we don't have any money for improvements". Everybody was very pleasantly surprised when work began to replace the main air-side electrical system. Big machines were digging up the old system, installed by the air force some fifty years ago. The ILS went out of service.

The Plane Spotters

As every Saturday, Brent took the commuter train northbound. Most weekends he dedicated to his hobby. This was not just his hobby, this was his HOBBY, plane spotting. His friend Sid,

two weeks earlier on the top of a hill just south of the airport. Sid started eating one of his home-made sandwiches, herring with orange marmalade, topped with vanilla yogurt. Brent checked his camera. Sid switched on his air band radio; it was their regular habit to carefully monitor the Tower frequency. How could they otherwise know what aircraft were arriving or departing? "Fascinating, how do these magical controllers do it?", Sid commented as he slowly took a sip from his white tea. "That was a strange call sign" he suddenly said to Brent. One minute later an enormous aircraft passed overhead. Like an albatross growing and growing in size. It almost entirely filled the sky above them. "An An-124 cargo plane, got some nice photos" Brent calmly replied.

The International Tower

For the fourth time that day the supervisor changed the runway configuration. Why should we be offering departing and landing aircraft a tail wind, one of the controllers asked. It was a fair question, at the Academy one of the basic things he learned was that aircraft should ideally land and take-off into a head wind. However, his time at the Academy had been well before the local politicians, while enjoying the benefits of the international airport, began arguing that aircraft should not fly over their neighbourhood. They considered that noise was the main local environmental issue, easy to understand for everybody. So consequently, the political compromise was to spread the problem of noise equally, it was as simple as that.



Being desperate to move, she informed everybody she knew of her situation. One day Tony called. A private company had won the contract to run a cargo airport about an hour south of the capital, they were looking for controllers.

dressed in a warm green anorak matched by an orange cap, joined him at the main central station. Sid was almost as eager as Brent to visit the international airport. After thirty five minutes on the train, they changed to a local bus and finally arrived at their destination fifteen minutes later. They returned to the excellent location they had found

You will get some diversions from the south, the supervisor informed the runway controller. The ILS has been out for almost an hour at the cargo airport.

The tail wind component on the runway was almost ten knots. Someone decided, he did not know when, that up to ten knots tailwind was perfectly alright.

The Approach Control

Three diverting aircraft joined the standard inbound flow. It was a mixture of different types and sizes, an An-124 from an airline Lucia had never heard of before was followed by a business jet with a foreign registration and finally a low-cost carrier plane ten miles behind. Plus all the other scheduled traffic. The wind situation was a bit strange; she knew how to handle this though, she went on doing her job as always. Lucia vectored for runway 36, today being used in mixed mode for both take-off and landings. The An-124 descended very quickly then started to slow down earlier than most aircraft normally did. She understood why - the tail wind aloft was stronger so the ground speed was higher than usual. The business jet behind had a much higher altitude and a much higher ground speed. Their flight crew asked for the ILS frequency, first time visiting this airport?

The International Tower

The line of departing aircraft at the holding point was growing, not that it bothered him, it never did. The approach control delivered the inbound

aircraft with exactly the agreed distance in between; Lucia was always professional. An An-124 called, the first time I'd talked to the crew of one of these and I'd never seen one before. The Macchiato coffee was excellent.

The Approach Control

The business jet was still well above the glide slope; Lucia did not like to break him off though. Something told her that their fuel endurance was not that great and to follow a diversion with a break from the straight-in approach would extend their airborne time by another ten minutes, possibly fifteen. But she did not know for sure of course. Lucia asked the pilots to reduce speed as much as possible, it did not help much. When she told the business jet to contact the tower, the distance to the preceding aircraft was just on the agreed minimum and she knew it would be less moments later. The speed was still high too, but the tower controller could handle this couldn't he? "Say again tower frequency", she repeated the frequency; you could tell by the voice of the pilot that their workload was high. "Thanks", the business jet had left the approach controller.

The International Tower

The An-124 landed and the next departure, a Boeing, lined up. "Vacate first right"; it was a rapid exit leading to a parallel taxiway. He could not see the aircraft now, it had started snowing and the visibility was reduced. He checked the A-SMGCS display, the Multilat symbol was off the runway and the SMR reply confirmed this. He

saw the next inbound on the radar screen, it was only two miles out, why did it not contact him? Unusually high speed too, he thought as he cleared the departure for take-off. "Tower, be advised that the right wing of the just-landed aircraft is still out over the runway". The aircraft remained stationary at the threshold. The comment made him confused, the landed aircraft was clearly off the runway according to the HMI display. Then seconds later came "he has vacated now" and he could hear the increased sound from the engines as the aircraft started rolling. The business jet was on a half mile final.

The Plane Spotter

"It's started snowing mate, let's go home", Brent said to Sid as a business jet passed over their heads. "Emmerdale on television in two hours. It's looking like a good bet if the weather carries on like this".

At the same time, at a cargo airport to the south, the ILS returned to operational. **S**

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