

A Landing in London

There is always considerable importance to being the 'Leader of the Pack', but we had been almost two hours late departing Toronto, and now we found ourselves right in the middle of the early morning rush-hour traffic over Britain, as flights from around the globe all wanted to land at the same time.

Europe gets busy when the sun comes up. Even though flight conditions were perfect, London Control had just advised that we would have to idle back and take up the customary archaic elliptic flight pattern when we arrived over Bovington, and we could hear similar comments to airliners approaching the Lambourne beacon to the south. It's called "holding", and it's the British way...even on a day as nice as this was.

That being the case, it was pointless blasting away at high speed toward Bovington and burning precious jet fuel we'd need for the time in the hold, so since we'd just have to dawdle in the racetrack pattern anyway, there was certainly no rush to get there. As we descended through twenty thousand from the direction of Belfast, I slowed the Boeing 747 back to 230 knots...as slow as I could go without extending some flap. Not a good idea to use flap in the relatively thin air at twenty thousand feet.

It was as clear a morning as I have ever seen over England, in my entire aviation career. Remarkably clear, with visibility unimpeded in any direction for at least 250 miles, no question. Not a trace of the nagging stratus or strato-cue, so synonymous with the British Isles.

We could have easily been over Edmonton or Saskatoon or some other prairie city, with their crystal skies that seemingly go on forever. It was absolutely glorious, and I marveled at the countryside as we passed over the midlands, as the English call them, with their oddly-shaped fields bordered by hedgerows and stone fences.

One good thing about the 747 on gorgeous mornings such as this, is that we just leave the automatics plugged in. The autopilot's name is George, and he does a stellar job. London wanted us to be lower than fifteen thousand by the time we were 45 miles back, so we simply tapped that into the flight control computer. We had already set up the prescribed hold pattern at 120 degrees orientation for BNN in the control boxes as well, so the machine was set, and we could take a few seconds to sight-see... an extremely rare occurrence around London.

Arriving over Bovington at 230 knots, the '47 dutifully rolled into a perfect right turn in complete obedience as we continued our descent through thirteen thousand. Every few minutes, the London Controller would re-clear us down another thousand feet, whenever his lower terminal traffic would permit. I'd tap the '47 on the glareshield, and it humbly complied, like a well-trained horse. The lower we descended in the clear morning air, the more vivid the ground became, and I was struck by the intricate organization of creeks, dams, factories and housing settlements, all knit together with roads and rails.

And airports...because of the fact that we seldom see the ground, I hadn't realized that there were several small airports nested right in London Heathrow's very armpits.

When a rare lull in the air traffic chatter occurred, the First Officer keyed his mike and asked the British traffic controller the name of one tidy-looking little airport off to our left.

"That would be High Wycombe, suh" came the reply. The Brits are quite formal and often include the "sir"... but our query suddenly opened a can of worms, as a third voice chimed in with a markedly British accent: "Who's that inquiring about High Wycombe?" ... the inference of course being "what colonial twit doesn't even know about the airports that encompass the infamous Heathrow?" I mean... (chortle) (snort). Realizing that this topic could become a bit verbose at a busy time, we didn't respond to the challenge and moved our pinkies away from the mike buttons; the airwaves reverted back to business as usual.

Once more around the pattern: fly northwest for one minute, turn right and fly southeast for one minute. Again. And again. Computers do such an excellent job of mundane tasks. Steadily we stepped the 747 down through the altitudes, down to eight thousand feet, the lowest 'airliner altitude' available over Bovington, which thinking about it, allows the smaller airports like High Wycombe to coexist with the gaggles of heavy metal flying overhead.

Finally, it was our kick at the can as London Control asked us to call "The Director" (ahem) who, in London parlance, is the gentleman responsible for providing the 'radar steer' information to fit us into the queue to our final approach. We called, and he advised that he was setting us up for Heathrow's Runway 27 Left.

London Heathrow airport has only two runways that are used, and they run east-west, exactly parallel to each other. However, to keep the planes far enough apart for safety, one of the runways lies on the north side of the airfield, and the other lies on the south side, with the main passenger terminals being situated between them.

Many airports have a similar runway arrangement. London Heathrow's runways are designated "Left" and "Right", another common practice within aviation. So, after hearing the Director, we planned a landing on 27L, and dialed the necessary frequencies on the receivers to set it up on the screens. We were thus prepared for the approach and landing.

Noise is a giant watchword in London, in that if you make it, it costs money... meaning, and there are fines. Big ones. The trick to this, after leaving any of the rally beacons like Bovington or Lambourne, is to carefully employ a steady-rate semi-glide descent, all the way down from eight thousand feet to the interception of the instrument landing approach slope, and finally end up aligned with the runway, about eight-to-twelve miles back. Tickle the throttles of the four big Pratt engines ever so slightly... just sufficiently to extend the glide, and the people living below scarcely know there's a plane overhead.

The big sin, on the other hand, is to allow the 747 to descend quickly down to approach altitude, which would then require fistfulls of power to fly the remainder of the way low-and-slow, and rattle the rooftops in the process. If that should occur, the boss will most certainly schedule a little chat back at home base: guaranteed. However, this time, the Director was quite helpful, in that he periodically issued little 'hints' of how many 'track miles' he expected the flight would still have to fly to the runway... a gesture which affords crews a measure of assistance in their calculations. It's a bit like a cordial Maître d'... wending a guest through a darkened restaurant to the proper table. Such is the manner of the London Heathrow Director.

And it all ran like clockwork... the 747 obediently took the last turn to the final approach course, and voilà: the glide slope indicator centered beautifully! We were noiseless; science triumphed again.

Established on our final approach, we could see the runway ahead, but off to the left a bit. Glancing at the compass on the Nav screen, I realized that the ship's autopilot was holding a good chunk of crab to compensate for wind drift. It was apparent that the wind at three thousand feet was far stronger from the north than was being reported on the ground, and a glance at the CRT in front of me substantiated that subtle observation. No matter though, as it was all part of a pilot's day at work.

Once on final approach, aircraft speed control becomes critical, as London tries to fit aircraft quite close together for landings in fairly rapid succession, so accordingly we set about extending more flap in order to maintain sufficient lift at the required lower airspeed. The wheels (all 18) were extended then as well, and with the increased air drag of the gear, we stabilized at 160 knots.

She was "steady as she goes" and, pretty as a picture, descending on the electronic glide path. Generally, we just punch the buttons and let George continue to control the plane during all the busy stuff around the radar area, especially at the end of a long night of flying over the Atlantic. Then at a mile or so before touchdown, we disconnect the automatics and land the ship by hand, because practically any pilot anywhere prefers to do the landing rather than leaving it up to the machine. Such was the plan that morning; I would do the landing.

The Director called a final time and asked us to switch to the tower frequency, because it is the control tower that actually issues the clearances to aircraft to takeoff or land. A 'clearance' is in fact 'permission', with the inference that 'all is clear'. The airport runway is always the sacred domain of the tower controller alone, who issues the takeoff or landing clearances when all is safe.

In addition to rigid speed control on final, good runway technique after touchdown is even more imperative... the reason being that in order for Heathrow to maintain the high volume of arrivals and departures on only two operative runways, each airliner must spend as little time on the pavement as possible. The tower controller watches the landing traffic carefully, knowing full well that the next plane is only a scant minute behind. Cool coordination is the big key.

We called the tower controller, and were greeted with a cheery "Good morning Air Canader". Sometimes in England, a trailing letter 'a' of a word (as in 'Canada') is pronounced by the British as an 'er' sound. Don't ask why... like many things over there... it's just 'British'. We get used to it.

Unbeknown to us at that moment, the preceding airliner had missed the high-speed turnoff on 27L and was still occupying the runway...the runway WE needed. Our first hint of consternation was a quick radio transmission from the previously 'affable' tower controller: "Air Canader, do you you have runway 27 Right in sight?" I glanced at my First Officer, and saw him glancing quizzically at me, as in... "he DID say 27 'Right', did he not?" Since I was the pilot doing the flying on this beautiful sunny morning, and we had indeed seen both runways since we turned onto final, the First Officer calmly replied "Affirmative". Almost instantaneously the controller shot back "Air Canader... now cleared to land on runway 27 RIGHT".

My first reaction was "You've GOT to be KIDDING!" followed quickly by "What? Can we DO this?" We were less than forty seconds from touchdown and the other runway was 'away up north'. My tired eyes had been squinting toward 27R ever since the tower had asked the first question, and now my educated mind suddenly said "yes".

Instinctively both hands thrust forward simultaneously... the left clutched the left horn of the hefty yoke and the right hand grabbed the four throttles. I thumbed the 'disconnect button', and instantly I had two mitts full of honkin' 747 looking for a flat place to land.

In the next few seconds, the reason for all this sudden kafuffle became clear as we heard the tower controller call to the aircraft immediately behind us and issue an instruction for him to overshoot, because runway 27L was still occupied by another aircraft.

By this time, I had smartly rolled the '47 over on her right wing to head her northwest, toward the threshold of 27R. My mind raced, as this had to be flown perfectly. Timing was the key ingredient, for I knew too well that I had to make an equal 'left bank' at precisely the right moment so as to finish up 'exactly' on the 27R centerline.

A Boeing 747 is a huge flying machine with a lot of inertia, and there would be scant room left for any corrections. If I was a little tired before, I was wide awake now, and my eyes raced over the flight instruments for altitude, airspeed and glide path information... my right hand ready to jockey the throttles if required. I realized that the glide path on my screen was still that of 27L, but I reasoned that since the two runways were practically abreast of each other, the information would be valid enough to guide us in this maneuver.

Descending a forty-seven too quickly and grazing trees and rooftops can ruin an entire day, so I quite relished the glide path indication. I had scarcely begun to utter that fact to the First Officer, when he announced "The right glide path is on the screen, Boss". In the flurry of activity, he had quickly punched in the new runway. Perfect. That F/O was so cool - a true professional!

I kept the lumbering '47 on a continuous descent, while repeatedly checking the airspeed. I marveled how accurately it stayed on 150...precisely the speed we wanted. Then it occurred to me... duh... no wonder... my right thumb must have missed the auto-throttle disconnect switch when I had initially grabbed control of the plane, so the auto-throttle system had continued to operate, and had nailed that airspeed right on 150. I grinned at the realization and thought to myself "Thank you, Mr. Boeing", but then pressed my thumb again and disconnected the system for sure, in preparation for the touchdown! By this time we were getting low, and in fairly tight. It was time to start the roll to the left.

The new glide slope indication told me we were on the money; this was all going to work. Then I remembered the north wind; it would affect my turn. A quick glance at the wind presentation on the CRT told me that it was still blowing from the north, but not nearly as strong as before, probably because we were now flying much closer to the ground.

That meant a slight delay would certainly be required in my timing, so I carefully eased off a bit and stopped the turn five degrees short of the runway heading. We were now on course and on the glide path for runway 27R. We had pulled it off.

The runway end passed beneath us; slowly I closed the throttles and raised the nose... and in a few seconds we could feel the gentle wiggle-wiggle of the main wheels rolling on the pavement. The eagle had landed. Even before the nose wheel began its descent on to terra firma, I had snapped the four throttle levers back into the reverse thrust position. I lowered the nose and we slowed... 120, 100, 80 knots... it was time to kill the reverse thrust and begin a slow turn onto the high speed taxiway. We certainly didn't want to block another runway on poor old Heathrow! They had had enough complications for one morning.

And as we taxied along, we talked and laughed and acknowledged the instant excitement... and I gazed upon the 747 and thought to myself: "Yeppir... this is good... we have truly arrived!"

5 October, 2003

W Roger Michelson