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FORUM

A FANCIFUL LOOK AT AIR CARRIER OPERATIONS IN THE YEAR 2050

Cass D. Howell

Captain Lance Boyle smiled as he felt the smooth rippling thunk of the landing gear tires meeting the runway. Now *that* was how aircraft should land, not this vertical takeoff and landing nonsense employed by the newest “planes,” still called that even though they didn’t have wings at all. He eased forward on the side-stick controller slightly. The nose gear touched down and the strut compressed gently to give him a better view of the runway here at Los Angeles Air and Space Port. Captain Boyle continued the roll-out, pleased that his last landing in the “real world” had been a good one. Regretfully, there was no one else in the cockpit to congratulate him, since the Boeing-Bus 370, like all of the transport aircraft of its era, was a single pilot machine. Now the airplane, and the pilot as well, was being phased out, victims of the laws of economics and advancements in technology.

As the aircraft turned off of the runway, Captain Boyle let the taxi sequencer take over. The guys in the tower were pretty much doing the same as him now—watching the automation work, looking for problems, collecting a paycheck. At least they still had a job for the foreseeable future. Captain Boyle would have a job too, but not one that he relished. Next week he would report to the National Flight Control Center at Cheyenne Mountain to assume the duties of a Ground-Based Airline Transport Pilot (GBATP). He was not looking forward to it a bit. Now that almost all airliners were pilotless drones, though, prospects for a “real” piloting job were practically non-existent, except for the oldest aircraft out there. Granted, he rarely touched them, but the BB-370 was equipped with flight controls and an old fashioned windscreen. The latest aircraft, BB-390s and above, didn’t even have a cockpit, now a superfolous extravagance that deemed an aircraft to be a throwback to an earlier, more romantic age of flight. Oh, the new aircraft looked like they had a cockpit, at least from a distance, but closer inspection revealed that the “windscreen” was in fact just painted on, a concession to those who recalled piloted airplanes fondly.

Though he wouldn’t admit it publicly, Captain Boyle knew that pilots themselves were largely to blame for the present circumstances. It developed from the confluence of two powerful forces, safety and economics. Perverse at it sounded, the drive for safety was a problem for pilots, since it had been evident since before the turn of

the century that human error, primarily pilot error, was responsible for the great majority of aircraft accidents. The solution seemed obvious; as the automation technology improved, reduce the number of pilots onboard. Fewer pilots equaled fewer accidents, right? Of course, the pilot’s unions had screamed bloody murder when aircraft manufacturers, at the airline’s request, went from three pilot to two pilot crews back 70 years ago, warning that the inevitable result would be a soaring accident rate, insisting that three pilots were indispensable, and that the traveling public would pay for this misjudgment with their blood. Unfortunately, it didn’t do much for the union’s credibility that the accident rate, instead of soaring, continued its downward trend, reflecting safer, not more dangerous, flying. In the 20’s, when transport aircraft with only a single pilot aboard were coming on the market, the unions again screamed bloody murder, predicting that the accident rate would soar, that two pilots were indispensable, and that the traveling public would pay for this misjudgment with their blood. Unfortunately, it didn’t do much for the union’s credibility that the accident rate, instead of soaring, continued its downward trend. Ten years ago, when pilotless large transport aircraft appeared, first in the cargo fleets, then spreading rapidly to the airliner side, the pilot’s union, rather wearily now, screamed bloody murder, etc., etc. Unfortunately for the union, the accident rate continued to fall, as triple redundant automated systems, including navigation and traffic management systems made errors, and thus accidents, less and less likely. Captain

A Fanciful Look

Boyle watched as the aircraft docked itself at the terminal. Since pilots no longer had access to the passengers, and vice versa, Captain Boyle was dressed as he usually did on flights during the summer, in his favorite Hawaiian shirt, cut-off shorts and loafers without socks, another bennie won by the union. Of course, he could dress better, since he was getting paid \$5 million a year now. That was the good news, the bad news was that he, and the other pilots, were making so much that the managers here at Greyhound Air could hardly wait to replace him and his fellow pilots with an entire fleet of pilotless drones. As they explained it, it was an economic imperative to stay competitive with the other major, Southwest International. In any event, better safety at less cost sealed the fate of manned aircraft years ago. Captain Boyle was just glad that he had a piece of the good times, which made possible the luxury summer home in the 53rd state, Nova Scotia.

Captain Boyle checked the electronic security blotter for what had transpired in the passenger cabin during the flight. Since for security reasons he had no contact with anyone in the back, this was his only way of learning of the mayhem which usually took place on long flights. Hmm, arrests for the usual fistfights, an attempted murder and a score of strong-arm robberies. Even though alcohol had been banned on aircraft for years, there was usually enough smuggled aboard to result in a slew of public drunkenness arrests. The Safety and Security (SS) force, which had replaced Flight Attendants when food had ceased to be served, was on board in force to keep order, but with 1800 people aboard, already surly from the five hour check-in process, it was a losing proposition. Only the lowest class people, most with criminal records, ended up in these cattle cars anyway, since practically everyone with any money had their own jet or used one of

the many charter services. It seemed that the inevitable answer was bigger brigs, but of course, management hated this option, since it meant fewer paying seats. The new anti-matter drive aircraft, having virtually unlimited power, had a carrying capacity of well over 5000 passengers; from what Captain Boyle had heard, these giants were even equipped with SWAT teams to deal with the rapes and murders that happened all too often in flight. The security surcharge was already 40% of the ticket cost, and that didn't even cover half of the actual expenses. Pretty sad, he thought, and then greeted the officer who unlocked the cockpit door that opened into the armored access tunnel. As they walked down the ramp, Captain Boyle could see some of the mega-liners through the bulletproof glass.

Well, from his new job location in Cheyenne Mountain, he would be supervising the movement of about a dozen of these monsters at any given time, ready to take over and fly the aircraft remotely should any emergencies arise. Pretty cost-effective, one pilot to "fly" a dozen aircraft, which made his new \$10 million salary seem justifiable. In reality the technicians dealt with virtually everything that came up, but management (at least for now) thought the public needed the reassurance that a "real" pilot was on duty, more a security blanket than anything else. Boy, the union was really going to throw a fit, Captain Boyle thought, really scream bloody murder if they ever tried to get rid of the GBATP's, why the accident rate would just soar, and...

THE END

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CHRONOLOGY

- **World War II: First use of drone aircraft in combat**
- **1972: First full autopilot flight (takeoff to landing, L-1011) in large transport airliner**
- **19??**
- **2016: All military reconnaissance aircraft are drones**
- **2020: Fedex purchases first single-pilot large transport aircraft**
- **2025: First pilotless fighter aircraft in USAF inventory**
- **2026: FAA approves automated formation flights for air carriers to save fuel**
- **2031: Embry-Riddle changes name to Embry-Riddle Air and Space University**
- **2033: First single-pilot transport aircraft at Delta**
- **2035: Airline consolidation continues; Southwest International and Greyhound Air evolve as the “big two”**
- **2037: First anti-matter drive transport aircraft in service**
- **2038: Last piloted aircraft retired at Fedex**
- **2042: First pilotless transport aircraft in service**

