

Fuel Emergency

~By Adverse Yaw

It was a crowded little room filled with computers, monitors and printers placed there for the use of the pilots. This was where they would research the weather along their route and other related information pertinent to their individual assigned flights. It was staffed by an agent with experience in the operation of computers and printers. He or she seldom knew the difference between jet blast and a cold front, but they could organize paper. Flight plans, weather and notams were printed for each scheduled flight, and laid on the counter in an order where the pilots could find their assigned flight plan and weather packet. After looking it over carefully, they would sign a copy for the company records and take the remainder with them.

Captain Walter Summerlin stood at the counter going over his flight plan and release. The Boston weather was presently clear and forecast to be CAVU (ceiling and visibility unlimited) all day long, the aircraft assigned to him was clean with no MEL (minimum equipment list) placards what-so-ever. Not only great weather, but the Jet Stream was going to push him along almost 200 knots faster than normal. Of course, this meant that the return would be much slower than normal. But, Walt would worry about that later, being the consummate optimist, he always looked for tail winds and who knows, the wind could change by the time they headed back to Columbus. After signing the release, he gathered his paperwork and headed for the gate. Life was good; at least this bright fall morning was starting off to be fantastic.

Down the Jetway and into the forward entry door of the Boeing 757-200, once onboard he met his cabin crew who he had flown with many times before. He gave them a briefing about the weather, turbulence, and use of the seat belt sign, etc, etc, all very standard stuff, but necessary items to brief the crew about. When things became critical, a misunderstanding could be divesting.

He stepped into the cockpit and introduced himself to his first officer whom he had never seen before in his life. "Good morning, I'm Walter Summerlin, and you can call me Walt, I seldom answer to anything else," as he shook the young airman's hand.

"Hi, I'm Kenneth Ellis, the newest of new guys in the Company, you can call me Ken or Ellis, I answer to both. I don't mind telling you that this is my first flight on the line, and my very first flight in a Jet, other than the simulator of course. I hope that you don't mind teaching me. I'm a little nervous, but I am eager to learn."

"Whats to learn?" Walt warmly replied. "Your being fresh out of ground school and simulator training . . . chances are you know more than me."

They both grinned as Walt slipped into his seat handing the paper work to Ken. Ken fed the flight plan information into the onboard computers as Walt watched.

"Good job, Ken," Walt stated as he called the First Flight Attendant on the intercom. "Lisa, I want to mention it again that I am going to leave the seat belt sign on until we reach cruise altitude due to possible turbulence, so you guys just remain seated until I turn it off."

"Okay, I heard you the first time, Captain!" He ignored her condescending tone.

The aircraft was exactly like the simulator, and Ken started to feel more comfortable. He completed the duties he had been trained to do for the past few months methodically and one at a time. The rest of the preflight formalities and necessary briefings, checks and checklist were completed as the Jetway was pulled back from the aircraft. Before Ken knew it, they had pushed away from the gate. They had started both engines and all checklists to this point were complete. He was asking Ground Control for a taxi clearance. Everything seemed to go like clockwork suddenly they were at the departure end of the runway waiting for the Control Tower to give them a takeoff clearance.

Seconds later, they were airborne and climbing like a homesick angel, already headed northeasterly for their destination.

"Your going to love flying the 757 Ken, it always has an over-abundance of power, and today it is exceptionally strong due to the small fuel load. The flight plan computer has taken into consideration the tailwind, the weather forecast, and the fact that we don't need an alternate airport, thus, the very light fuel load. We are as light as a feather and those Roles Royce engines are loafing. By the way tell Center that we can keep this rate of climb all the way to cruise altitude, and maybe he will take the hint and keep us climbing, " Walt suggested.

Ken complied.

Walt requested long range cruise from the onboard computer, and it complied as the auto throttles moved back a little. "Also Ken, let ATC (Air Traffic Control) know that we are slowing to long range cruise to conserve fuel."

The fuel flow was a good bit below what the flight plan had called for and their ground speed was still over 600 kts. It seemed like only minutes had passed when they were in range of Boston. Ken had excused himself from the ATC radio in order to get the ATIS (Automatic Terminal Information Service) on another radio for their arrival.

The Center Controller advised Walt that Boston was below CAT II minimums and asked if they were CAT III qualified. "What?" Walt asked, "Boston was forecast to be CAVU all day long," he replied.

"Yes sir, I know, but something moved in and the RVR (Runway Visual Range) to Runway 4R is 600 feet and is variable. Much of the time it is less than 300 feet."

"Well to answer your question we are not qualified nor certified for CAT III approaches," Walt answered.

"Sir. would you like to hold?"

"Yes, I'm ready to copy the holding clearance."

The controller gave them a holding clearance at a fix about 30 miles west of Boston. And, Walt advised them that he was slowing to holding speed as they descended.

After completing the arrival info card Ken turned to Walt and said, "Boston is on it's butt, RVR is less than a thousand and they are taking CAT III approaches only."

"I know Center told me and, we are entering the Hold as we speak, You watch the Aircraft and report established in the Hold, I'm going to talk to Dispatch. Ken You have ATC and the Aircraft. Okay?"

"I have ATC and the A/C." Ken replied.

After a short calculation, Walt discovered that there wasn't enough fuel to get back to Columbus safely. He called his dispatcher and advised them of the current weather at Boston Logan, and that things were beginning to turn sour. He said. "We can't hold for long on the fuel we have. What would you like us to do?"

"Albany is marginal with moderate icing conditions, can you get back to ALB?" the Dispatcher asked.

"I don't want to waste what fuel I have going to marginal weather conditions, besides I have a 200 knot headwind between here and ALB. Can you find me an airport near here with landing minimums?" Walt asked calmly. But the Dispatcher was becoming very nervous, Walt could hear it in his voice, and the situation was beginning to stink.

"Standby, I'll get back with you," the Dispatcher said. After several minutes he came back on the radio, "Providence was open and CAVU, would you like to go there?"

"That'll have to do," Walt answered.

"Okay, amend your release to read 'Destination Providence (PVD), signed Jones at 1305 GMT.' Call me on the ground and we will figure out what to do about Boston. Okay?"

"Okay, we'll give you a call on the ground at PVD."

Walt thought to himself, CAVU was what they had said about Boston's weather, hope their right about Providence. He decided to advise the passengers and flight attendants later when he could give them something more definitive.

"Ken, I have the airplane and ATC, we are headed for PVD, get the new ATIS for PVD and get ready for the new arrival and new destination."

"Okay, new destination PVD. I'm off the ATC to get the ATIS." Ken replied.

Walt called; "Boston Center; this is Trans Con 351, we would like to proceed to Providence as soon as practical."

Boston Center; Roger, Trans Con 351, the weather in PVD has deteriorated and isn't any better than Boston Logan, do you still want to go there?

"Negative, we will stay in the hold for now, and I'll get back to you in a second."

"Roger Trans Con 351."

Their eyes met. "Walt, you're not going to like the ATIS I just copied down for PVD."

"I know Boston Center just read me the PVD weather. We have less than 40 minutes of fuel and I think we have only one choice, but I want to know what you think Ken and if you have any ideas."

"I don't have any ideas, what is the one choice anyway?" Ken asked with a concerned look on his face that could be read like a neon sign.

"Well, this particular aircraft hasn't been certified to Auto Land, but it is capable, I've done it in visual conditions several times. Most of the time it did a

fantastic job, but I have seen it do such a terrible job that I had to turn the autopilot off and make the landing myself. The company has been intending to get the fleet and the crews CAT III certified for a couple years, but so far we are still only CAT II qualified," the Captain said holding eye contact with Ken.

"So what are you saying?"

"Maybe we should declare a fuel emergency and shoot a coupled ILS approach with the auto land and auto brake function, and pray that everything works like it is supposed to. I don't think we have much choice because when the fuel is gone we will be up a creek with no paddle, but I would like to hear what you think. Got any other ideas?"

Ken soberly stated, "Lets go for it Sir."

"Hast makes waste, but we don't have time to piddle, declare an fuel emergency and tell them what we want to do."

"Boston Center, Trans Con 351 is declaring a fuel emergency, we have less than 40 minutes of fuel aboard, there are a hundred and fifty three souls aboard including the Crew. A crew of six with a hundred and forty seven passengers. We would like the CAT III ILS to runway 4R.

"Roger Trans Con 351, turn left heading 080 descend and maintain 4000'. You are presently 20 miles to intercepting the localizer, you will intercept the localizer approximately 5 miles outside of NABBO. Do you have enough time to get down?"

Walt told Ken; "Tell them that we will have plenty of time."

"Boston Center; there will be no problem getting down, Trans Con 351."

"Trans Con 351 your cleared for the Cat III ILS Runway 4R, contact Boston Approach Control 120.6, good day."

"Roger, Trans Con 351, good morning."

"Boston Approach, Trans Con 351 passing 9000 for 4000, good morning."

"Good morning Trans Con 351, we have cleared the airspace just for you. You are cleared to land, contact the Boston tower and 132.22 at NABBO."

"Wilco, Trans Con 351."

There was much to do setting up the approach and running the checklist. This was all accomplished in plenty of time. As they were intercepting the localizer both pilots were very focused and a bit of adrenalin was flowing. The Autopilot was all coupled up with Autoland function on with the Auto brake armed. All check lists were complete, Walt double-checked the ground spoilers to make sure they were armed for landing. The clouds were thicker then Walt thought they would be. They letdown into the clouds around 700 feet above the Runway. The airplane was locked on both the localizer and the glide slope and the auto throttles were holding Vref +/- 2 knots. Around 50 feet above the runway the airplane flared, the autotrottles closed and the airplane made an almost perfect landing. One or two centerline lights could be seen and nothing else. The Autobreaks worked and the aircraft stopped with in 3000 feet of touchdown in the dead center of the runway. Walt made the common mistake of trying to turn the aircraft without disconnecting the Autopilot, and it wouldn't allow him to because the autopilot wanted to keep the airplane in the center of the Runway.

"Trans Con 351, advise when you are clear of the runway, then contact ground control 121.9."

"Roger, we are clearing the runway at Yankee, going to ground control, good morning and thanks for your help."

Once at the gate, the park break released and they were in the chocks, checklist completed, both pilots breathed a sigh of relief.

Walt said, "Ken you are doing a fine job on your first day, why don't you fly us back to Columbus?"

"Okay."

"I'll get the walk around and the paperwork and we will plan an on time departure. I'll see you in a few minutes, I'm getting me a Starbucks Coffee, would you like one?"

"Sure, that would be nice."

The Captain called the Dispatcher and told him what had just taken place. Later that day, he filed the required reports because of having to declare the emergency. He heard that there were three other airliners who had fuel emergencies that morning. A forecast is important, and a bad job at forecasting could be very dangerous. Walt never departed without an extra five or six thousand pounds of fuel again.

In all the excitement he never informed the flight attendants of the emergency. It was just as well that they didn't know. One passenger commented, "he thought it was supposed to be clear in Boston, where did the fog come from?" he asked.

Walt and Ken flew together the remainder of the month and became great friends.

~By *Adverse Yaw*~ = = ~ ~ ~ ✈
