

Hello, Columbus – by John Allard

Loosely based on Just Flight Cargo Pilot® - Microsoft Flight Simulator experiences....

Chapter 2 – Cruise

"Flaps zero."

"Flaps zero." Joe's hand moves and the hydraulic noises begin, peak, then diminish slowly as the last notch of the boards comes all the way in. It takes about 12 seconds. Now the noise stops and both the aircraft nose and the airspeed needle have risen somewhat.

"Shut down the jets"

"Shut down jets", replies Joe, discarding my superfluous "the".

The Provider K-model has a pair of turbojets outboard of the recips. They're only used for take-off, but they're a blessing when we're heavy, making short runways seem longer – and safer. I think of them as a quarter of a B-52 acting as tugboat for us. Once we're out of the harbor, we don't need the tug any more.

The high pitched whine of the jets that's just audible amid the noise of the big radial engines tapers off quickly as Joe pulls the condition levers back together, to the flight idle detent. He pauses for 30 seconds to let them spool down and cool down a bit, then brings the levers all the way back to the cutoff position. The nose comes back down some as the jets considerable thrust vanishes. There isn't much reduction in sound however, as the Pratt & Whitneys bellow their climb-out song at 28 inches of manifold pressure. That's de-rated quite a bit from their Air Force days. 140 octane gasoline just isn't an option any more. If we were to run the boost any higher on 100LL for any extended time detonation would likely blow the jugs right off the crankcase. Still, even at this power setting they're noisy, despite the headsets. I love their sound more than almost any other on Earth. I've even been known to slide the left headphone cup off my ear so I can enjoy it unattenuated, but not tonight. The doc is close to convincing me that's not a good idea any more, and probably never was. Still, life is good.

"Gainesville approach, Boxwings Freight Flight 201, climbing through one five hundred for twelve thousand", I hear in my head phones. It's Joe calling on our departure frequency. Ocala has no tower, so the procedure is to take off and contact our departure controller in Gainesville on the designated frequency once airborne. Gainesville is 40 or so miles north, more or less along our route of flight tonight. We'll be in his area for a while before being handed off to Jacksonville Center and points north.



"Boxwings 201, Gainesville approach; roger; radar contact; climb and maintain one two thousand; altimeter is two niner niner seven." He doesn't sound like an auctioneer tonight. Traffic must be light.

Passing through two thousand feet I begin to pull the mixtures back a little, starting the leaning process. That won't be complete until we're level at 12,000 and stabilized at our normal cruise speed of 168 knots. I'm careful about leaning. We need the power, so can't leave them full rich all the way up, but too much of a good thing is, well, too much of a good thing. Too lean too soon and the engines will suffer, perhaps even fail if I'm too ham-handed with this. It's the thing I pay the most attention to in the climb, even though there are about five-hundred or so other things that need some watching too.

The oil pressure, and the oil, cylinder head and exhaust gas temps are in the green; I'm watching the latter two closely as I lean the mixtures another tad. The cowl flaps are only half-open now. The autopilot is engaged; we're tracking an outbound radial from OCF at Ocala, making 800 fpm at 130 knots. The autopilot is using almost all the nose-up trim at this weight, speed and rate of climb, optimal in my book. We're wallowing along nose high with this load, but that's what the wing needs to support all that cargo back there, and all this fuel and aluminum, and to still produce enough lift to climb. The longitudinal CG had ciphered out right in the middle of the range. It will shift forward slightly during the night as we burn off fuel though. We were a handful of pounds under 51,900 at lift off; legal...just. Orville and Wilbur would be amazed – and proud, I think.

I twist my behind back and forth a little to settle more comfortably into the designed-to-be-uncomfortable seat as the tension of takeoff drains away. I continue to monitor the climb. There isn't much to do really, except to bump the mixture levers aft every half-minute or so, but there's much that bears watching. Joe's got the radios covered; my brain gives that a tiny sliver of attention, almost sub-conscious. It's necessary that I keep my head in the ATC and navigation game, but Joe will do most of it. He's changing to the preset frequency on the Nav 2 radio now and I hear the Morse ID of the next VOR in the headset for a moment. The engine instruments are looking good, the flight instruments show the autopilot flying better than I could and it's taking us where we want to go. That's up, in this case, and north on the 348 radial. The DME steadily clicks off the miles, though not too quickly at this speed. The fuel gauges show about what I expect, but we'll get a more precise read of that when we're at cruise.

We're flying IFR, of course, so the guy on the ground staring at the radar scope has the primary responsibility for keeping us away from other aluminum objects and them from us. A minute or two ago I noted that the loom of our lights in the overcast ceased as we passed through 3,200 feet, indicating we were in the clear. Now I look out my side windows for just a few seconds. There's not much to see, though I can discern that we are above the cloud deck and there are



stars, but no moon. The overcast below is near solid, nine tenths at least. I don't see any other aircraft lights, and don't expect to see many tonight except in the vicinity of Atlanta. None the less it always behooves one to remember that we're not entirely alone up here. Radar and air traffic controllers are good, but not infallible. I look when I can. At this attitude there's not much view ahead and we're not really going where the forward windows are pointed anyway, but lower. We're not likely to see anyone in that direction unless he's descending into us. I direct most of the look-out-the-windows part of my attention to the side windows during the climb. If there's a problem, that's where it will appear. I know without looking that Joe is doing the same on the other side.

Our route tonight will take us through the Atlanta area, literally right over the busiest airport in the US. We'll be level at 12,000 long before that, well out of the approach traffic. Even at this time of night though, there will be plenty of other aircraft nearby. Most will be below us but inevitably nearly every one of them will have to descend or ascend through our plebian altitude on their way to or from the patrician flight levels at 18,000 ft. and yonder. It's still fairly early evening and KATL has plenty of scheduled air carrier arrivals and departures until 10:00 or so. It tapers off a lot after that, but not to zero, and as the airline traffic dwindles, the air cargo flights increase. It's a lot like I-75, but in three dimensions. Both the airspace and the airwaves are likely to be busy.

The timing is good. We'll be level at cruise soon enough for me to enjoy a leisurely cup of coffee, maybe two, before we begin to get into the Atlanta traffic. That's very good. I freely admit to being an unreformed, make that unreformable, caffeine addict. It's not a matter of staying awake — I managed a couple of hours sleep this afternoon and won't be getting drowsy. It's just feeding a comfort thing, and will help me be comfortably alert while transiting Atlanta's sphere of influence. I don't want to be juggling a coffee cup there, so am thankful for a quiet hour between ToC and Atlanta.

Here we are, coming up on 12,000, nose is coming down, airspeed's coming up slowly, slowly, but nicely; now back a little on the throttles as the speed increases. Back some with the prop levers, slowing them to a less fuel-thirsty 1,850 RPM. Keep an eye on the manifold pressures as the props begin to take a deeper bite of the cold air. Close the cowl flaps the rest of the way. Nudge the throttles back some more as we come up on 160, 165, 167....168 knots. Right there! That's nice. Manifold pressures look good at 21 inches; now adjust the mixtures one more time. CHTs and EGTs are good; we're on the roof and cruising! Oil pressures remain rock solid, the oil temps are still high green and will come down just a bit after throttling back from the hard work of the climb. The P & Ws are more muted now, but still loud. The vibration no longer hammers our spines, just rattles things a bit. Everything looks good, everything sounds good, everything feels good. Out of the corner of my eye I see Joe logging a reading from the fuel totalizer, and ask what he's showing.



"Fifty-one hundred; five twenty a side." All right! We have over five thousand pounds left and each engine is using 520 pounds an hour. We're right on the numbers. We can cruise for almost five hours at this power setting; more if things begin to look tight and we throttle back. Life is good.

C-123s don't normally have a fuel totalizer. We spent more money than I care to think about having one put in. The device with its digital readout and controls had to go on the co-pilot's side of the panel where there was a little more unused real estate available. Cargo flights tend to be loaded heavy, and the trade-off between fuel and cargo a matter of critical attention for nearly every flight. Even when we're not heavy there isn't a lot of money to be made ferrying fuel. Sometimes we cut it pretty thin. Tonight was easy. We had a cargo that could be divided, with some going along and some left behind. Other times, that luxury may not be available. If the payload is a vehicle, for instance, leaving an eighth of it behind, even if we could figure out how, isn't going to make the customer want to seek us out for future business. That's not to say we don't stay legal, we do – always. But the required fuel reserve for an alternate airport plus 45 minutes can be pretty tight when the wind and the weather are against you. We like to be well on the plus side of that, but it's not always possible. The totalizer helps us know exactly where we are, fuel-wise. My theory is that it will allow us to make a timely, informed decision to divert if necessary. A decision based on fact, not on the hair standing up on the back of my neck while trying to read analog fuel gauges that might have been plus or minus 10% accurate when they were designed nearly a half century ago. That, in my opinion makes the totalizer worth the price, even if we only have to make that call once.

As I reach behind my seat for the thermos, I reflect on the mission so far. We had a rough start with the late arrival of the cargo and the potential overweight condition. We've recovered from those, accepting one, avoiding the other. All the remaining pre-flight preps after that were nominal. Start-up was uneventful. The taxi, takeoff and climb were as planned, just later than we'd hoped for. It looks like the worst is behind us now. The late start will not affect things at Rickenbacker. As long as we're on the cargo ramp by 0400, no one will have a squawk.

We've still got the Atlanta controlled airspace to transit and the rest of the route to fly, but those should not present any problem. Our winds tonight are mainly from the left, forecast to shift slightly behind us as we get further north. As tailwinds go, this won't amount to much. It's not a headwind at least – no impediment. The Terminal Forecast for Rickenbacker is OK. Expected surface winds are light; there's a broken ceiling forecast at 800 AGL but with good visibility below. We're expecting to shoot an ILS to get in there. No big deal; we just need to do it right. It looks like a reasonably good flight, weather-wise.

The coffee is rich and black and still hot enough to produce steam. I take a first tentative sip, testing the temperature before committing to a bigger gulp. It's just



right. As I settle back to enjoy the cup I let my eyes continue to wander over the panel and the windows. With the nose nearly level now, there's a better view ahead. I can see someone's beacon far ahead, crossing left to right. He's a ways off and will be out of our path long before we get there. The controller won't call him out to us unless he breaks 4 miles, and he won't. It looks like he may be heading for Jacksonville; he appears to be descending.

The air is smooth tonight; no turbulence at all. Visibility above the overcast is quite good, at least twenty miles, maybe more. I don't really mind the night flying. I'd better not. Flying freight is a round-the-clock business and a lot, maybe most, happens at night. I enjoy the pace – and the peace. The sky is less crowded when it's dark. You can usually see the traffic better too because of the A/C lights, except when they're lower and against city lights.

The flying public mostly prefers to do their flying as they live their lives, in the light of day. The airlines compete for their business by accommodating that preference. During the day the skies are filled with jetliners coming and going to and from just everywhere. There are a few at night, but not many. Those airliners that are flying are mostly half-empty. The main reason the companies schedule them is to get the seats where they need to be for the next day's business. Even ATC has a different flavor at night. The controllers are more relaxed, the pace is slower, and you're more likely to hear some banter between the controllers and the flight crews. The pilots, for the most part are more relaxed too at night. You're less likely to be delayed in the dark, shuttled three area codes in the wrong direction from your destination to be fitted into a long line of planes strung out along the approach course. If you ask for a different altitude or a different approach or a different runway at night or if you'd like to roll out on the runway after touchdown and take the last taxiway, you're much more likely to have your request acceded to. It's not a bad environment.

I debate a second cup as I drain the dregs of the first one. I guess I'll wait. There'll be plenty of time for more after Atlanta. I stow the cup and scan the panel again. Everything's nominal and the engines sound sweet.

"Two zero one, contact Atlanta approach on 132.55; have a good evening", I hear in the headphones. Joe acknowledges and his hand moves to the radio stack. I muse for a second about co-pilots. I'll bet they get to be near ambidextrous if they're right-handed to begin with. Everything's on their left, almost. I try to remember my co-pilot days, but soon give it up; it's too long ago.

Joe clicks to the new frequency and checks us in with the first of the Atlanta controllers of the evening. We'll be handed off to at least two others as we proceed through their cauldron tonight. I tweak the altimeter on my side, setting the barometric pressure that was our token welcome gift from our new controller. Joe does the same on my right.



I stretch up a little in the seat, looking over the nose. Far ahead I can see the loom of the lights of the great Georgia metropolis, just a dull glow at this distance, diffused by the overlying cloud. Visibility must be considerably better than the 20 miles I'd estimated earlier. Atlanta is huge, covering a thirty mile circle, near enough, but it's still way off. Closer to us there are some holes in the overcast and ground lights are visible through the near ones. Further off, you don't see the ground lights or even the holes because of the angle, kind of a parallax thing. As we get nearer, more holes will probably appear, filled with the bright lights of Atlanta and the surrounding area.

It's time to get prepared for the busy part of the flight. We'll have to be watching now. There will be traffic called to our attention every couple of minutes all the way through. It's unlikely we'll have to change course or take any other actions, except to make our planned course change over the VOR, but we'll make every effort to eyeball each target called out to us. It's the prudent thing to do. Visibility aft of our lateral centerline is just about non-existent in this plane, but anything forward of our 9-3 line should be visible unless it's under the nose. The auto-pilot is flying, we're set up in cruise and everything is stable, so Joe and I will be able to focus most of our attention out the windows for the next 20 or 30 minutes.

"Two zero one, traffic at your two o'clock, DC-9, descending through one six thousand. Report traffic in sight." I see Joe looking, bending his head forward a little to look upward under the top edge of our windows. Without straightening up, he keys his mike with the button on the yoke and responds, "Two zero one, traffic sighted." Somehow he's reduced the standard "...have the traffic..." or "...traffic in sight..." further yet. Well, it's started, and we're still 42 miles from Hartsfield by the DME. Better stay sharp.

We listen as an audio-induced mental picture of the terminal area south quadrant slowly unfolds for us. It sounds a little more frantic than usual. Something's different tonight. The weather's not bad enough to account for it.

Then, "Atlanta approach Delta 437 is with you, out of one four thousand, for three point three."

Atlanta responds with, "Delta 437, roger, altimeter two niner eight six. Expect vectors for the ILS two seven left approach."

There's a pause, and Delta comes back, "Atlanta, Delta 437, any chance for two seven right or two six left for us tonight?" He's trying to avoid having to taxi across a parallel runway to reach his gate, asking for one of the runways nearest the cluster of terminals that's embedded amongst five parallel runways.

"Negative, Delta 437. Two seven right ILS is down tonight, and I can't cross you over to the north side."



Aha! That's what's different tonight. The clouds are low enough to require ILS approaches and one of them is toes-up. Forget what I said earlier about a more relaxed pace at night. Three hours from now it won't matter, but this early in the evening Atlanta's still a very busy place. With a runway OIA and instrument weather, everyone will be working hard to keep things flowing. "Well," I remark to Joe, ", at least he got his wish. He won't have to cross an active runway to get to his gate tonight." Joe just nods with a half-smile and returns to his side window.

End - Chapter 2