

United Airlines – The Dynamics of the 1980s and the 777-200 Launch

Bruce Dennis's thoughts and insights on United Airlines and its airplane purchases in the 1980s. I will discuss the Industry issues during this period and what UAL was trying to accomplish.

Secondly, I will share my candid opinions about UAL management, where they came from and their background.

Finally, I will discuss the 777 launch, the "Working Together Agreement" and how important it was to our success. The WTA pushed the 777 campaign over the goal line. We may have been successful without it -- but I doubt it.

I retired from Boeing in 2006 with fond memories. However, thinking about the 777 Campaign takes me back almost 35 years and I have certainly forgotten various items. This may be a little folksy in places because that is my style. I drove you all nuts at Boeing long ago so I might as well keep it up.

While I'll cover specific UAL campaigns where we were successful, I won't include offers made or concessions given. Some of these were very complex and are still in contracts today. It is a complicated world.

An Industry in Turmoil:

In 1978, the airline industry was deregulated. Airlines could go wherever they wanted to fly domestically as long as they could get landing slots. Networks were being experimented with and it was a field day trying to grab passengers.

Alliances were starting to form. Some airlines exploded in size and then cratered (Braniff) while other airlines didn't know what to do. The largest airline in the country (UAL) was slow to react and rather stodgy in its approach. Considering United's size, it was very slow in gaining altitude and purchasing airplanes.

A new type of CEO was emerging. The successful CEOs had backgrounds in finance and marketing. None of them were pilots and quite frankly, not very interested in the technical side of the business. Bob Crandall (AMR) was inventive and creative in developing frequency networks, bonus miles, and upgrades to

attract passengers. He trained many key people who left for other airlines. Some airlines completely disappeared (PAA, Eastern, etc.) and new ones emerged.

Boeing developed two new airplanes (757 and 767) to assuage the fuel price increase issue that the airlines were facing. These two airplanes fly at a Mach .80 speed and were replacing 727s, until then the workhorses of the fleet, which had a dash speed of up to .87 mach. Internationally, the 747-200 cruised at .85 mach. and was the King of the skies. The DC-10-30 and L-1011 cruised at about .84 mach. Cruise speed needed to be addressed for the big twins on the drawing board that were entering the Market.

The industry was facing union strife. UAL pilots walked out for a month in 1985. Crandall with his creative style developed a two-tier wage scale and sold it to his pilots' union.

But all of you know and remember these issues and understand the implications for Boeing back then. Was our sales force capable of talking about airline networks, operating costs, traffic flows, passenger spill, airline alliances, freedom of the air, etc.. Wow, running an airline isn't easy!!!! I laugh now at the Program Sales Documents we took to the airlines that were 100 pages thick and had one "cost per mile/seat mile" fan chart on the last page. Our sales presentations were clearly under whelming with no economic data.

So we hired some new guys in marketing to study things like cash flow, investment requirements, and the industry in general and where it was going. I was one of six guys hired to work for Myron Anton to look into the economic impacts of airplane purchasing. We can thank Bob Crandall for many changes.

United Airlines in the 1980s:

I doubt that any airline went through more of a transformation than UAL during this challenging 1980s. They were the country's largest airline and very slow to react to deregulation. Their fleet was comprised primarily of aging standard bodies (737s, 727s, re-engined DC-8s), some new Boeing 767-200s which UAL helped launch (but these airplanes had small fuel tanks and couldn't even fly coast to coast non-stop), and a large number (56) of DC-10s that UAL liked. As UAL

developed in the 1980s, it was like two airlines: a domestic carrier and a growing foreign carrier.

Dick Ferris was United's CEO and his goal was to create a "one stop travel shopping" conglomerate by purchasing Westin Hotels and Hertz Rental Car. Furthermore, UAL purchased the Pan Am Pacific routes, getting about 20 airplanes in the deal, all of which were basically junk. Still, it was common knowledge that these routes would become very, very important in the future, but UAL needed airplanes to service them. Despite his vision, Ferris never could convince his stockholders that it would work and he couldn't control his pilots' union. The result was trouble – a hostile takeover bid for UAL because it was underperforming.

Enter Bruce Dennis:

John Hayhurst entered my office in November 1984. I knew him in passing but was surprised when he asked me about my background (MBA, small airplane pilot) and said, "Would you be interested in being the UAL sales person?" This was beyond my wildest dream and I immediately said, "yes." He said, "I'll get back to you!" Later that day DDT's personal assistant called to ask me to come down and talk to Dean. We had a good conversation and he sent me off to Dick Albrecht's office. I asked, "Right now?" He said, "Yes, it is all set up!" (I'm sharing this because that day I was launched on a rocket that I never visualized happening!) After a few minutes, Dick said, "Let's talk to Bob Wylie and get this transfer done. Bob never knew what hit him -- we were very different people and I doubt I was the top of his list, but to his credit he laughed and said, "Welcome aboard!"

Hayhurst took me to Chicago (UAL headquarters) twice, Denver once (UAL pilot training) and San Francisco twice (UAL Maintenance) and introduced me to everyone. He did a total core dump of his knowledge of UAL and I owe him total credit for my coming success. His main lesson – you must get to know all the key players in the airline to be successful.

Ferris runs amok at UAL:

I met Ferris on my first trip to Chicago. He exuded energy, ordered coffee and outlined his vision of a travel conglomerate named Allegis. He laughed and said,

“The press said that sounds like a gum disease.” He was charming and impressive. The EVP of operations was in the office next door – Jim Guyette. He offered that I would be very busy very soon and encouraged me to call any time. .

Within a month UAL asked for an offer for eight 747-200s for its new Pacific routes, concurrently asking Douglas for an offer for eight MD-11s. Now it gets complicated. Remember, UAL is fighting off a hostile takeover bid. Ferris made a private call to Frank Shrontz and Hal Haines to ask for a \$700M loan to help fight the takeover. It took only a few hours for Boeing to call Ferris and say, “Yes to the \$700M loan contingent upon the purchase of fifteen 747-200s! There were all kinds of legal issues, not to mention negative Customer pushback about our showing favoritism to UAL. This loan was important in that it was unique to UAL; two weeks later we signed the order.

The UAL pilot strike in mid-1985 sealed the fate of Dick Ferris and he was forced out. Frank Olson, the CEO of Hertz, was asked to replace Ferris and he accepted only on a temporary basis because he wanted to stay with Hertz. The Board agreed and they launched a search.

At this time, we were selling United 737-300s at about a two per month cycle. This was before my time but the “deal” was remarkable for Boeing because it was a 10 firm and 90 option deal that Boeing just didn’t ever do. Hayhurst and Thornton’s strategy was to spur 737 sales. Dean showed a lot of moxie because UAL needed the new airplanes and were slow coming to the party. Although low risk, it marked another special deal for United.

Enter Stephen Wolf:

Wolf is 6ft. 6in., an immaculate dresser, and rather shy. He got a BA in sociology from San Francisco State and went to work at American Airlines, joined Pan Am in 1981 and became CEO of Continental Airlines in 1982. There were a few other stops along the way but he was known as a mover and a shaker in the airline industry. He became President and CEO of UAL in 1987 with a goal to make UAL a global superstar that dominated the industry. He immediately brought in two other American Airline employees: Jack Pope as CFO and Lou Valerio as Sr. VP, Planning. Wolf wasted no time; he wanted to meet with Thornton immediately in Chicago.

DDT and I fly back on the United DC-10 from Seattle, leaving at 8am. Dean's goal was always to board just when the door was closing. I was scared to death that he was going to miss the flight.

We get to UAL headquarters and are going through Security when Wolf appears from upstairs. This is a big lobby with probably over 100 United employees milling around and the room went stone quiet. Wolf's height and position make him a very imposing figure. I share this because whenever DDT or FAS visited UAL, Wolf was there to greet them. I was told he never did that for anyone else.

In Wolf's office we immediately get down to business. He asks Dean about our production rate on the 737. We were at about 14 to 17 per month at this time. DDT says, "If we raise the rate to 21 per month, how many do you want?" Wolf says, "How about 6 to 8?" Now put yourself in my spot listening to this conversation. DDT thinks for about 20 seconds and says, "I can commit to three 737s a month to UAL but no more." In his straightforward manner, Dean explains that he needs to think of our other customers as well. Wolf rather forcefully, emphasizes that he needs more 737s since UAL has an old fleet that needs to be energized. As a Sales guy, I'm being blown away, Dean, get the order!

After about an hour of back-and-forth, Wolf suggests we all have dinner and that he wants us to meet Jack Pope, the new CFO. Pope is Yale and Harvard educated and cut his teeth under Bob Crandall at American. Pope also brought his lead negotiator pitbull with him from American to Chicago, Lou Valerio. Lou already had a reputation at Boeing and was not well liked. He wasn't about relationships, just making the deal. Valerio was not at dinner – just Wolf, Pope, DDT and me.

At dinner at the airport Westin, Wolf asks for a 250 airplane deal for 737-300s/400s/and 500s. Pope handles the negotiating and things are moving fast. Wolf tells us that to fix the UAL pilot union issues, he wants them to accept a split wage agreement (like American's) and plans to commit to the union by showing the numbers of new airplanes he is buying. We came to an agreement quickly because the 737 deal was in place so there were few contractual issues.

UAL adds the 757-200

The UAL domestic fleet rollover occurred within the year.

Boeing was trying to sell the 757 but the big airlines didn't like our price. Condit went to American and pitched Crandall on the expense of building the 757, essentially saying "You should be pleased with this offer!" Crandall shot back a difficult rejoinder, "The cost to build the 757 is your problem. I know what the 757 is worth in the American system and that's what I'm willing to pay." Tough talk from a tough customer.

We are into a total sales blitz at UAL because they also want the 757. At the annual Conquistadores meeting, in between playing poker, riding horses, sipping scotch and laughing for a couple of days, Thornton and Albrecht sit down with Wolf and Pope and work out a 757 deal. DDT stops by my office several days later and hands me a paper napkin, saying, "Let's memorialize this!" Written on the napkin was an agreement for one hundred 757-200s at an aggressive price. As usual, UAL added complexity by including a tax break on their DC-8s using a "like kind exchange" clause. Life is good. The domestic UAL fleet has been rolled over and is in place.

Problems on the horizon:

But life was not so good with the worker bees at UAL and Boeing. Among several contentious issues, I'll highlight one. We are witnessing an increased demand from UAL for free stuff, some simple, some costly. The UAL attitude was basically, "Hell, we've totally committed to Boeing but you're not willing to work with us." Boeing's attitude was, "Hey UAL, we're busy and you always don't get to go to the front of the line and get a huge discount!" As the Sales representative, I felt a lot of pressure to make these issues go away, especially since Lou Valerio, the tireless pitbull negotiator, is in my face – and Bob Kenin's (head of Domestic Contracts) about clearing up all open items. UAL's feelings were Boeing got the big sales and packed their bags and went home. This may be unfair but it is there!

UAL tackles the International Fleet issue:

Wolf is now focused on a total redo of his international fleet. UAL has fifty-five DC-10 -10s/-30s which were purchased in two tranches – 35 in 1973 and 20 in the

early 1980s. This becomes Boeing's Holy Grail, but the competition is fierce: the Airbus A-330s and A-340s and a potential two engine MD-11.

In late 1988 or early 89, I was called to Shrontz's office for a meeting with Shrontz, Givan, Jaeger, Condit and Albrecht. United wanted more financing from Boeing and we were refusing. Before the meeting we were climbing the walls in Givan's conference room, but by the time we got to Shrontz's office, everyone was on good behavior. I was by far the most junior guy in the room and I was told to sit at the end of the couch and be quiet.

I had never been in Shrontz's office and was curious how this would play out. This was supposedly a meeting on finance issues but PMC was there. Frank asked about UAL's demands and what we should we do about them. He asked PMC for his Product Development thoughts. Condit, ever enthusiastic, focused on what we could do with a 767 enhancement and wanted to proceed with customer contacts. Frank looked at me and asked about UAL. I said, "Wolf wants a new International fleet, both 747-400s and something new with international speed (.85 mach.)" I added that "I could set up discussions, but in my opinion, it would be a waste of time." United had just bought twenty 767-300ERs but this was for a unique Europe service. I ended with, "UAL wants a new fuselage diameter for international long-haul service." Think Asia!

Shrontz asked Condit what the 767 enhancement would cost? I believe PMC answered at \$3.0B. Then Frank asked the Magic Question: "What if we build a whole new airplane with a diameter that would please UAL?" Phil said something like, "I need to work on this but I believe the cost is about \$7.0B." With that, Frank said, "Let's seriously look at a new airplane design!" and with that, we were given our marching orders.

Condit, Thornton, and I go to Chicago

I'm not the one to describe all the engineering work done behind the scenes. But I'll address the sales coordination effort.

Condit, Thornton, and I go to Chicago to talk about our future airplane – we hadn't named it yet. We meet with Wolf, Pope, Guyette and a few other Senior

executives including Valerio. Condit lays out the “Planform” for our new 777 and discusses our objectives. The subject of speed comes up and both Wolf and Guyette insist on a Mach .84 or .85 airplane. Condit asks, “How and where will you use this?”

Wolf lays out his plan. The 777 will replace all fifty-five of his DC-10s. It will be used in the domestic US but is intended for international flights to Europe. Wolf then adds another important challenge, “UAL will mostly use this airplane to Asia and it must have Asia range capabilities.” Gulp!

Condit’s reply is straightforward: “Boeing cannot design an airplane with Asia objectives at the start. If we begin with a 7,500 NM objective, the engineers will design too heavy an airplane that will not be economically efficient. We need to do this in three steps.” Condit then laid out a plan for growing the 777 capability. I personally believe that UAL accepted Condit’s approach because UAL trusted Boeing.

Work begins in earnest to develop our new 777 and present it to the decision makers at United. We don’t yet have a deal because Boeing has only conceptual designs at this stage and it too early to present offers.

UAL sets up teams to evaluate our new airplane. Wolf does not want the UAL engineers to screw things up. The entire industry wants simplified designs and more standard equipment.

The folding wing Issue:

The 777 needs span. UAL lays down the challenge of New York’s LaGuardia airport, asking how we can make the 777 work there. Airports can support the MD-11’s 170 foot wingspan, but with anything bigger, airport changes would be necessary.

In developing the 777, the folding wing is not a show stopper. The OEW is increased 2,600 lbs. to accommodate the wing tips to fold up 18 feet. When presented with this calculation, Wolf said, “Then I don’t want it! That’s the equivalent of 13 revenue passengers lost for the life of this airplane.” No more

talk of the folding wing. I emphasize this because Chicago made this decision – not the engineers in San Francisco. Wolf wanted to stop unnecessary complications. Message: Chicago is in charge!

Six months of critical work

The 777 designs came together in about 6 months. I was so proud of the Boeing team. Their effort and commitment were remarkable. John Roundhill was brilliant in explaining complex issues. Mulally made trips to San Francisco and presented our design thoughts. UAL technical evaluations were accomplished by all UAL Engineering Departments and Gordon McKensie compiled the evaluations. Meanwhile Valerio's team hovered in the background in Chicago with the final say on changes and additions. Hart Langer, the new Sr. VP of Flight Operations, had come from Pan Am. He was an A-310 pilot and flew the side stick controller. He and John Cashman worked together and developed the flight deck to UAL's requirements. I believe that the side stick controller never became a hot issue. Jim Goodwin was Sr. VP of Marketing, so his people evaluated our proposed interiors. The "old" UAL could easily have gotten carried away, but, Goodwin and Guyette kept a firm leash on everyone. Joe O'Gorman was Sr. VP of Maintenance and Engineering in San Francisco – a no nonsense guy who was not about to let his engineers go wild.

These Senior UAL Executives were very important to the development of the 777. They kept the UAL bureaucracy in check and they developed good working relationships with Boeing.

While I witnessed many meetings where both Boeing and UAL came to agreement over changes to the airplane, I'm not in a position to explain how and why they were made. I CAN say that it was an impressive display of two large, knowledgeable organizations working together to build the best airplane possible.

Putting the offer together:

Since Boeing and UAL had negotiated five large purchase orders in the past four years, most of the hot buttons were worked out, but this launch gave UAL the desire to leverage items that they wanted. Valerio gave us a list of 30 items that he called “deal breakers.” He wasn’t willing to cave on any of them because Pope was holding his feet to the fire. Our Contracts Department chased down every detail trying to persuade Valerio to budge. He would not move.

The big question was how we arrived at 68 airplanes. Boeing complained that UAL wouldn’t tell us how many airplanes were to be included in the contract. My marketing analyst and Contracts needed to know how many airplanes to put in the offer. I said, “George, when is the first 777 delivery?” George said, “May 1995.” UAL would be retiring fifty-five DC-10s. Assuming UAL would take delivery of one airplane every month thru the year 2000, it all adds up to 68 new 777s. And THAT was the extent of our fleet planning. After everything was completed, DDT asked me where the 68 came from and I told him. He laughed and said, “Bruce, you should have made the offer for 100 airplanes!” He was probably right.

The Negotiations in Chicago – exhausting!

UAL asked the three manufacturers (Boeing, Douglas, and Airbus) and the three engine manufacturers to come to Chicago on July 6th for a shootout. Our Boeing team included Dick Albrecht, Dick Pearson, Gerry Kearns, Bob Kenin and me. Phil Condit will join us several days later. We were locked and loaded to make this happen. All six manufacturers were given equal time to make their case. The airframes and engines had been evaluated by UAL and they know them well. They were ready to see the manufacturer’s offers.

The phone rings at home!

At 5:00 o’clock on July 3rd, Regen and I were enjoying a gin and tonic on the dock. The phone rang and Regen says, “Jim Guyette needs to talk to you!” As I walked to the phone (no cell phones in those days) I can’t imagine what has happened. Jim was all business and said, “We need to put everything on hold for 90 days.” There was “an issue” at United and Wolf needed more time. I assumed it had to do with his Board but I do not know.

So I went out and told Regen that we are on hold. She asks, “Now what are you going to do?” I said, “Well first I’m going to finish this gin and tonic and then I’ll start calling everyone, beginning with Frank Shrontz.” The Boeing team was very disappointed but we had no choice. It was time to stand down.

Wheels up, off to Chicago:

In early October, the Team was off to Chicago. We discussed the implications of winning or losing – employment, knowledge, technical advancement, and finally history. It was a little surreal and so inspiring. We had done the work and we were ready. Dick Pearson appropriately named us the “Wolf Pack.” I remember thinking, “Bruce, how many people ever get to do this in their life?” It may sound corny, but what we were involved with was staggering.

We were all at the Westin getting ready for the next morning at 8. Each manufacturer was immediately led to a conference room with no opportunity to see their competition.

I knew my sales counterparts at Pratt and GE quite well and we wished each other luck. I did not know Roll Royce.

UAL specified that only three individuals from each manufacturer would be in the room to present their offer; we designated Albrecht, Kearns and Pearson because PMC had not yet arrived. Boeing wasn’t the first called in and we were nervous. The morning drew on and finally, in early afternoon our team was summoned. Guyette, Pope, and Valerio represented UAL.

Adding to the excitement and pressure was that UAL had also asked for an offer on sixty 747-400s, bringing our combined offer to an unheard of 128 airplanes worth about \$25B. It was a staggering offer.

The team returned and briefed us. Valerio is the lead negotiator and he never let up. No surprise there. He had said, “You haven’t addressed all of our concerns. Your offer is way behind the other offers.” Pope had chimed in, “Don’t you understand what’s at stake here?” Guyette was quiet. Our team was chagrined, but not beaten.

Meanwhile, the technical folks in Seattle are antsy to know what's going on. Roundhill tells McKensie that we can improve some details. I tell the Seattle engineers to stand down. We are where we are, we're moving at lightning speed and there's no going back.

We speculate how the other teams are doing. I know that Pratt will go to the wall to win this order. GE wants it but they are already guaranteed major business off UAL's new 737s. The rumor circulates that Rolls has made a "complete money dump." We pretty much knew what Pratt was offering, but not RR and the rumors were unnerving.

We pretty much lived on pizzas and bottomless cokes. Sitting in the conference room became boring. We competed by shooting paper clips at the ceiling with rubber bands. Pearson was pretty good at it. The negotiation has become somewhat bizarre and there was a lot of nervous laughter. But still, we were steadfast and unanimous in our decision not to change anything in our offer.

At 10pm United sent us home with a summons to return at 8 am. We jumped in the van and proceeded to the Westin. We didn't even stop at the bar – Team Boeing was exhausted.

The next day we are back in the conference room. Same routine except that Condit has arrived and will replace Pearson on the presentation team. It was nice having Phil there because he had a good relationship with Guyette and he added technical muscle to our team.

UAL calls Boeing in. Valerio has been up all night and is falling asleep. He is exhausted and seemingly distracted. Pope and Guyette carry the load.

Although Wolf did not participate in any of the negotiations, he was fully briefed after each.

Douglas and Rolls are sent home:

Douglas was not willing to commit to a two engine design and the MD-11 didn't cut it. I'm not sure what happened with Rolls Royce, but suspect that UAL didn't want to add more complexity to their system.

Guyette speech at the end of the second day!

It was late and we were again full of pizza when Jim Guyette came in. He thanked us for our hard work and said we deserved to win, but sometimes in life you just fall short. Pretty unnerving words. Jim left and we were all upset. Phil and Dick left to call Shrontz.

The Working Together Agreement

Things were pretty glum back at the Westin. Shrontz was talking with the Boeing Board and said he'd get back to us early the next morning. Condit and Albrecht started thinking about a Working Together Agreement (WTA) to discuss with Guyette to assuage UAL concerns about keeping tight controls – at Boeing and UAL – during the 777 design process.

At 8am the next morning, Condit calls Guyette and says we have some ideas about a Working Together Agreement. Guyette agrees to talk and the three of them meet privately.

The Working Together Agreement is now legendary. Written in longhand, it bound two magnificent companies together for a monumental undertaking

Three hours later, Condit and Albrecht – all of us -- are feeling better. Shrontz has given us authority to sweeten our offer. We adjust it accordingly and Condit, Albrecht, and Kearns march forth. We have done everything we can and now we wait.

WTA thoughts. Why was the WTA so important to both Boeing and UAL? From UAL's prospective, the airline was making a staggering commitment to one Supplier of airplanes – Boeing. Put yourself in Wolf's shoes and imagine the implications for that. UAL wanted a Boeing commitment for special attention.

Boeing certainly wanted the order but there were also other issues we were trying to address. We did not want a cost runaway due to UAL's demands for changes to our 777 design. We absolutely wanted UAL's help but we needed to lead and control it. Condit and Mulally must be interviewed for their thoughts on this. It was their airplane to build and they knew what the issues were!

We will hear the decision by day's end!

Radio silence all day. More shooting paper clips at the ceiling. The clock ticks slowly until UAL calls at 4pm. Condit, Albrecht, and Kearns head out to hear the outcome.

Boeing - - CONGRATULATIONS, you have won!

Yes, we were excited and relieved but there were no wild high-fives and jumping for joy. We were emotionally and physically exhausted. It was not unlike the Muhammad Ali-Joe Frazier fight in Manila. Frazier said that after 15 rounds, neither man cared who won – they just wanted it over. Wolf asked us to keep quiet until after UAL's press conference. He also wanted Shrontz to be part of it. We could not share the news with our colleagues in Seattle for fear of leaks. To my knowledge, only Mulally and Roundhill were told in Seattle. We wanted this to be UNITED's news, not Boeing's. We were in lock step in accordance with our Working Together Agreement.

When we got back to the Westin, Albrecht said, "Let's go someplace to celebrate and eat!" But it was Sunday in Chicago and all the restaurants were closed, so we had fish and chips in the Westin coffee shop.

One side note:

My wife Regen was an ABC executive at KOMO in Seattle. The reporters and news director knew something big was going on in Chicago. She couldn't keep the News Department out of her office, and successfully fended off a number of clever ploys to garner information. Finally, She just locked her door and went home.

Bruce's Final Thoughts!

So many people worked hard for this 777 launch. However, if a book is ever written, it must include what Wolf and UAL wanted out of this. He made it happen! Wolf rolled the complete UAL fleet, well over 400 airplanes. He committed UAL to one supplier – Boeing. He got a reprieve from his pilots union. He set up UAL to be a dominate carrier around the World - - especially Asia. I don't know how they financed it all but Wolf was a man of Vision and Guts!

Pope's final comment: "Dealing with Boeing on the price of the 747-400 is like dealing with the Kremlin!"

Sadly, one year later UAL committed to purchase A-320s. Valerio finally got his way. They wanted to add the 737-400 to their fleet but were not willing to pay more money over their price for the 737-300. At that time our 737-400 did not have coast to coast range. This is why UAL wanted it for the -300 price. I had moved on to a different job but DDT stopped by my office. He said, "Bruce, this is probably the biggest mistake I've ever made – not meeting this UAL demand!"