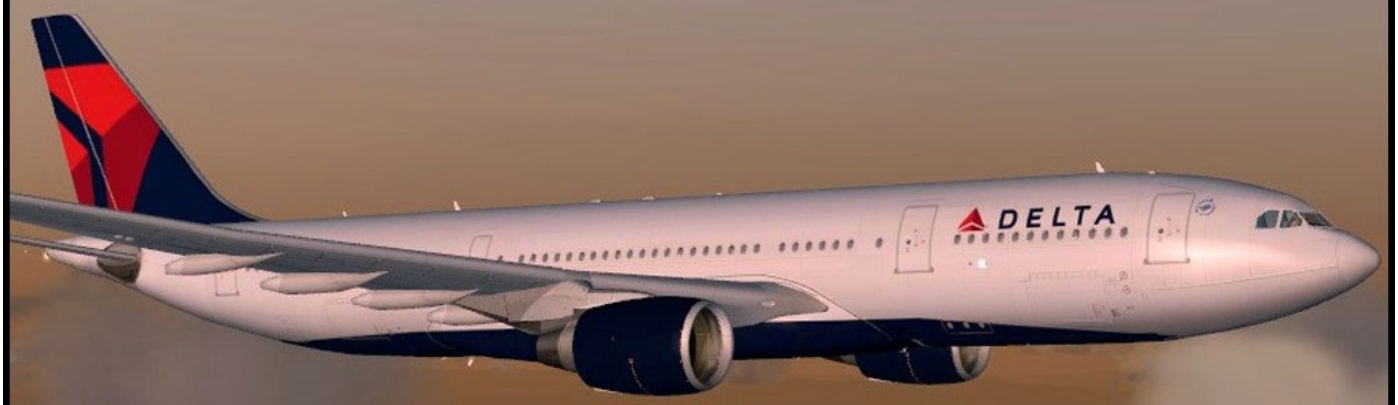
DELTA FLY!

MARCH 2010 EDITION

DELTA VIRTUAL AIRLINES MAGAZINE

9th Anniversary Issue!



In this issue:

Take Off in the CRJ,

Meet the B747,

DVAs ACARS Dispatch,

The “Bus” vs. the Mad Dog,

...and much more!

DELTA FLY!

March 2010

Issue #11

Our Staff:

George Lewis – Interim Editor In Chief
DVA Vice President

Larry Foltran – Layout
A320 Chief Pilot

Contact the Delta FLY! staff:
editor@deltava.org

Photos & Screenshots courtesy of:

- Larry Foltran
- Rob Morgan
- & David Keech

On the Cover:

A330 over Salt Lake City – Mark Springsteen

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This month's features:

From the President's Desk

Terry Eshenour - President, Senior Captain 777

Fellow Pilots,

This was a year of major transition stemming from Delta Air Lines' acquisition of Northwest Airlines. The merger added NWA flights and new equipment to Delta Virtual Airlines. This was all good news since we now have three new aircraft programs, -- B747, A320, and A330.

This is our Ninth Anniversary of providing aviation virtual services to our pilots. While nine years in non-virtual time may not be considered long; in virtual airlines longevity terms, we are definitely mature.

Delta Virtual Airlines continued to grow as we moved into the 8,000 series for Pilot ID's in the 8th year. Currently we have more than 2,100 active pilots. We have 40 dedicated volunteers on staff providing program services to our pilots. Our pilots are hard at work flying 404,000 flight legs, 1 million hours and covering 347 million nautical miles since the inception of the airline.

Our age, continued development and growth are testimony to the airline's overall success. Our founders discovered a business plan that met and continues to meet the needs of our community. As testament to the quality and character of our operation, Luke Kolin pointed out recently that our pilot database is complete from the inception of the business. For me, it is a privilege to be a member and have the opportunity to serve on the management team.

At the start of year 8 we set goals for our organization.

- Continue to focus on serving with excellence.
- Hire additional staff to support in a timely manner our pilots.
- Revise exam questions and aircraft operating manuals to assure accuracy and eliminate vague questions.
- Revise Flight Academy curriculum.
- Introduce Dispatch feature for ACARS.
- Complete fleet upgrade to be FSX compatible.

In the twelve months that followed, staff has made considerable headway in achieving and in many cases surpassing the goals.

- Totally volunteer funded to cover operating expenses.
- Active membership capped at 2,500 to ensure our ability to deliver excellent service.
- USA terminal charts updated every 3 months.
- ACARS submitted flight reports for the 10 flight legs for promotion.
- Live Dispatch using ACARS created with a staff dedicated to researching routes and providing live, on-request service.

- Exam questions review and revisions was completed. The exams are multiple choice, auto-graded with prompt results supplied to the pilot.
- AOM revisions published include: L-1011 MD-88, A320.
- The Flight Academy was temporarily closed to revise curriculum.
- Fleet is FSX compatible.
- Northwest Airline Merger resulted in adding NWA flights to DVA schedule database and creating A320 and B747 programs.

Our goals for our 9th year of operation contain some familiar and additional items.

- Continue to focus on serving with excellence.
- Hire additional staff to provide services in a timely manner to our pilots.
- Revise exam questions and aircraft operating manuals to assure accuracy and eliminate vague questions.
- Revise Flight Academy curriculum.
- Equip pilots with additional aviation knowledge throughout advancement.
- Add aircraft to our fleet.

There were staff changes in the past 12 months that are too involved and numerous to enumerate. All changes are posted on the website. Volunteers often experience real world demands that prevent them from carrying out their roles. Also, after serving in one position for extended periods of time there is often burnout when the role is no longer enjoyable. This is a management challenge to detect burnout in advance and find a different situation for the individual. We want our staff members to enjoy their roles just like we hope our pilots enjoy "working" for DVA.

I am grateful for the multitude of contributions our staff, management and pilots contribute unselfishly for the betterment of DVA. This characteristic is common among aviators including virtual aviators. Lacking contributors, we would not be able to function at the level we are experiencing.

Should you have a specific question or a problem with flight reporting, check rides, fleet installer, signatures, create a Help Desk issue. This gives us the ability to assign the matter to the individual best equipped to resolve it. We can also track the progress of resolving the matter. Staff and administrative issues placed in the Water Cooler can get lost and they are public.

The publication of Delta Fly! is a time consuming and often times frustrating task for the writers, editors and publishers. Every effort is made to publish quarterly, but time constraints do not always permit. George Lewis, and Larry Foltran are the energy behind its publication. We are deeply indebted to these gentlemen for their efforts. Their talented and energetic inputs produce a professional quality publication. We always have a need for content and assistance in publishing Delta Fly! Let George or myself know if you would like to take a role.

Your organization is busy, vibrant and maintains a high level of participation in the Cooler, events and instruction.

Wishing you all a safe end of winter/summer for our southern hemisphere pilots.

Thank you for flying Delta Virtual Airlines,

Terry Eshenour (DVA057)
President, Senior Captain

From Delta FLY!'s Editor

George Lewis

Welcome to the 9th anniversary edition of the Delta FLY

This issue features articles on the CRJ, A320, B744, and Dispatch.

We are looking for someone to take over the reins as the Delta FLY Editor. Ideally, you should have some experience putting together newsletters/publications and have a good grasp of the English language and of course, be a DVA member in good standing. If you are interested in this position, please send an e-mail to Human Resources at **hr@deltava.org**.

If you are interested in seeing certain topics covered in this newsletter, or would be interested in submitting an article to the FLY, please contact me via email at **editor@deltava.org**. Please keep in mind that as a rule, we do not do reviews on products, as this would be an endorsement. Any articles you may be interested in for the FLY! should be related to Delta Virtual Airlines. If you're not sure, send me an email.

Regards
George Lewis, DVA Vice President

The 747 Program Celebrates its First Anniversary

Rob Morgan (DVA2784)
Chief Pilot, DVA B747 Program

February 3 2009 saw the launch of DVA's much anticipated Boeing 747 program. A huge amount of work went into the launch of this program. Fleet aircraft had to be found, tested, and packaged for pilot download. The result is the Project Open Sky B747-400 for both FSX and FS9 that is the merged with the iFly panel, complete with a Flight Management System that is nearly as good as a payware FMS. But yes, there are some limitations. Also for FS9 only, there are B747-100 and -200 models based on the Ready For Pushback freeware package. Both are well modeled and can be a challenge to fly.

A new Operations Manual was also written and the information within tested and validated. A check ride had to be developed and extensively tested to make sure it was a fair, yet challenging test of a Stage 4 pilot's skills. More about the check ride a bit later.

Now just over a year later, there are 58 members of the 747 program and many others hold ratings in the aircraft. Personally, I was honored and humbled to be asked to serve as the first Chief Pilot for this program. I knew from my experience with the EMB-120 program that setting up a new program would be a difficult task. I also knew that, with the help of the DVA staff, it could be done. Of particular note, George Lewis and Luke Kolin where invaluable in getting the program launched. Both spent many hours putting the fleet 747 through its paces, identifying areas that needed work and providing critical data on aircraft performance. Then as the

program went live, we hired John DeBarr as my Assistant Chief Pilot. I doubt a better ACP exists. John is a perfect complement to the program and puts in many hours helping to ensure the entire program runs smoothly. Thank you John for all you have done.

All of the hard work has paid off. It is my own humble opinion that the B747 is not only the Queen of the Skies, but the Queen of the Fleet as well. Those who master her can hold their heads high knowing that there are no limits to their virtual piloting skills.

I do want to take a few moments to talk about the B747-400 check ride. As many have found out the hard way, the 747 check ride is not one you can simply kick the tires (all 18 of them) and light the fires, and expect to pass. This flight takes planning and you must be able to use all the capabilities of the FMS to the fullest. Both the departure and arrival procedures are both RNAV based and loaded with speed and altitude restrictions. In fact, many of the fixes have both a speed and altitude restriction associated with them. It is almost impossible to fly these procedures if you cannot properly load the route AND restrictions into the FMS. The fleet installer includes the iFly B747 manual which is several hundred pages long and includes a highly detailed section on using the FMS. It is a must read. Also, the Aircraft Operations Manual includes details on the known limitations of the FMS and provides work arounds for these limitations. The AOM also has complete check lists and a complete tutorial to help a new pilot get comfortable with the aircraft.

After mastering the departure and arrivals, the pilot must then negotiate a 180-degree turn from the last arrival fix to the ILS approach. This segment must be flown with the auto pilot off. Yes, you must manually fly the 180-degree turn while maintain level flight throughout the turn. This is not terribly difficult as long as you properly manage the "Pitch, Power & Trim" and leave the 600 pound gorilla in the cargo hold. Make your control inputs in a smooth and easy manner. If you find yourself overshooting the turn, don't turn harder. Instead, turn longer and correct back for the other side. Yes, the 747 is a big and heavy aircraft that will respond very nicely to a gentle touch. Attempting to fly her like a fighter with aggressive inputs and steep bank angles will give you nothing but problems. You must be ahead of the aircraft and anticipate what you want her to do next. After the turn, it is a simple matter of hand flying an ILS approach. Again, the ILS procedure has several altitude restrictions that must be complied with.

What are the most common errors? Violation of speed and/or altitude restrictions, poorly executed turn to final, poorly flown final approach segment, incorrect aircraft loading, and poor fuel planning.

Bottom line, whether you use the fleet B747-400 or the PMDG B747-400 for the check ride, the standards are the same and to be successful, you must plan the flight in its entirety. You must study the charts, properly plan the fuel (hint - use the AOM), the aircraft must be loaded per the check ride instructions, and the correct route entered in ACARS. Oh yeah, you must actually fly the route and conform to the restrictions specified by the charted procedures.

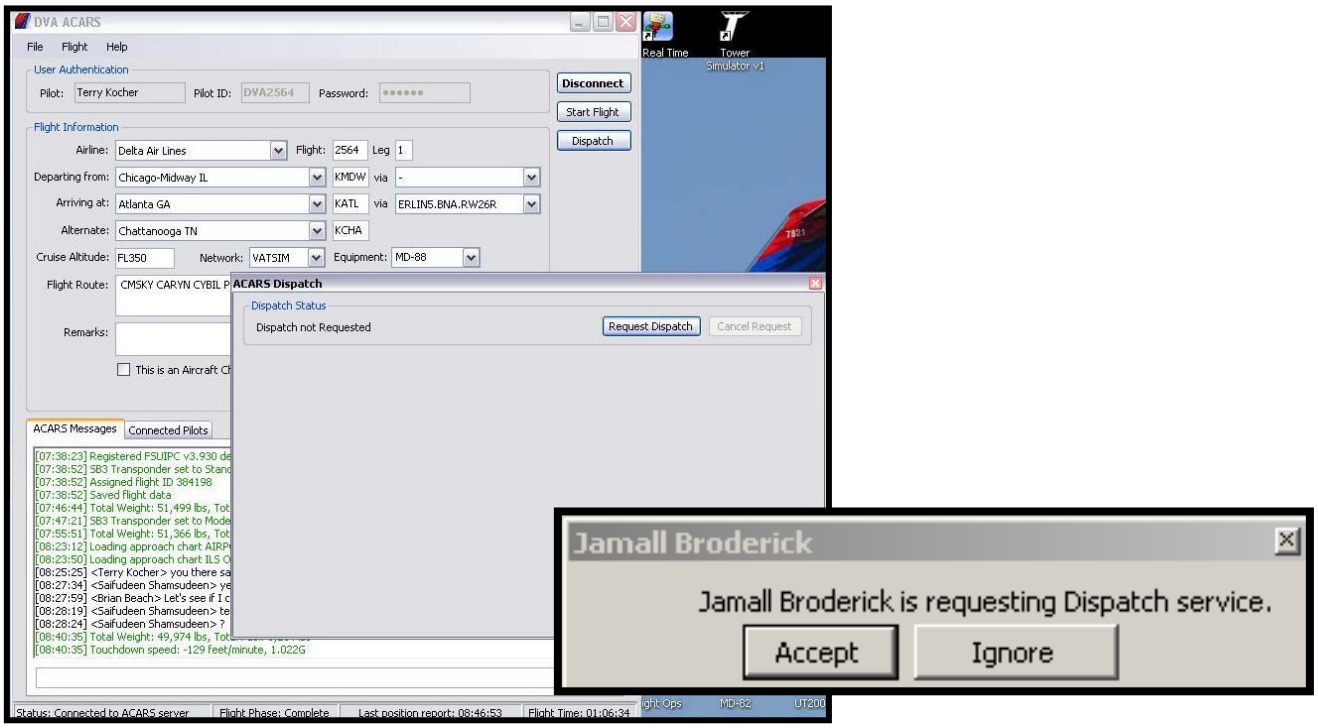
This has been a rewarding first year for the program and I have high hopes for the year to come. To everyone who calls the 747 home, congratulations on making this a successful program. ✈

A Tour of DVA's ACARS Dispatch Feature

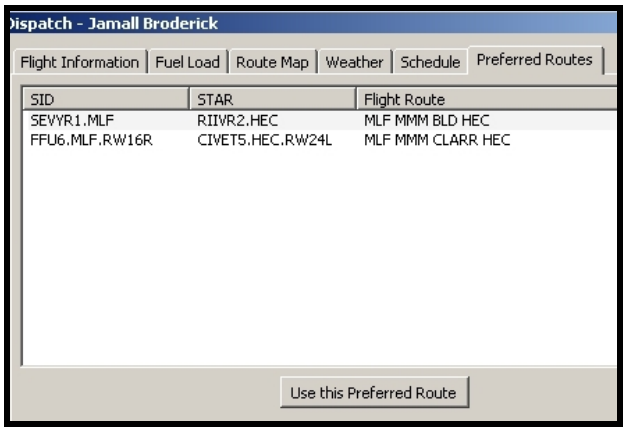
David Keech (DVA613)
Director of Dispatch, DVA B727 Program

I would like to welcome you to the Dispatch office of Delta Virtual Airlines. We have a small staff, but work diligently to see that your needs get met. As we begin our tour, I must warn you that the use of flash photography is not permitted and you are also being video recorded as we progress through the operations area.

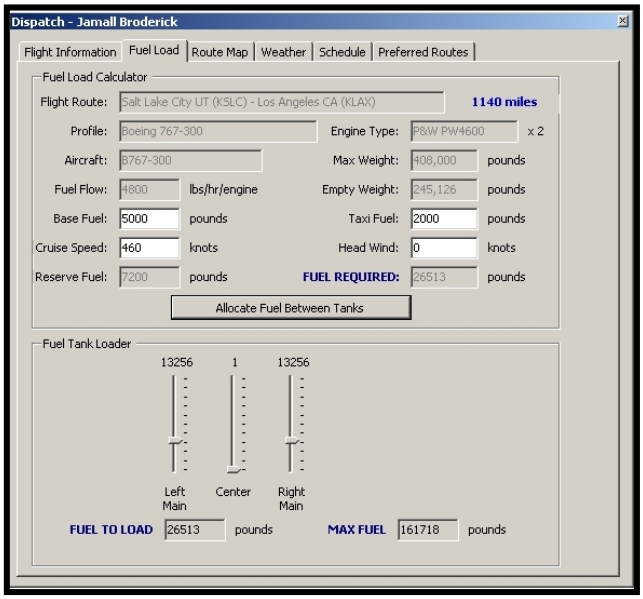
We first start off by introducing you to the program. Once you log into ACARS and have selected your departure and arrival airports, you will notice the Dispatch Button is lit up. By clicking this button, you are sending a request to any available dispatcher of your intent to use the program. What exactly does this do?



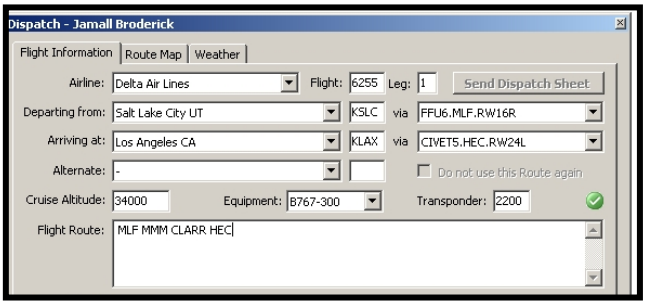
Well, as you can see by the example below, the program will recognize the routes you wish to fly, in this case KSLC to KLAX.



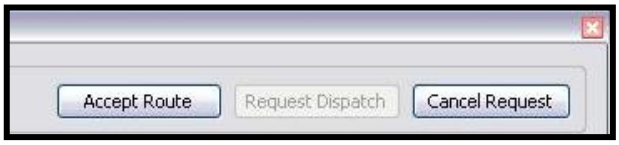
The preferred route is immediately recognized. The Dispatcher then accepts the preferred route. This is where they must do their homework. In the case of Salt Lake City (KSLC), you can't use the Sevyr1 SID for southbound operations. The Dispatcher then adjusts your fuel levels, so that you have enough juice to get to your preferred destination, and then neatly packages it up and sends to you.



This will then fill in the route information on the screen. If no Air Traffic Control (ATC) is online, the dispatcher assigns a squawk code, typically 2200 for DVA. If ATC is online, we will coordinate squawk codes to act as a ramp agent. Otherwise, you will get your squawk code from the online controller.



You then have the opportunity to review it and accept or reject it. If accepted, ACARS will download a .pln file for your GPS. You retrieve it from the download spot and your route is in the GPS.

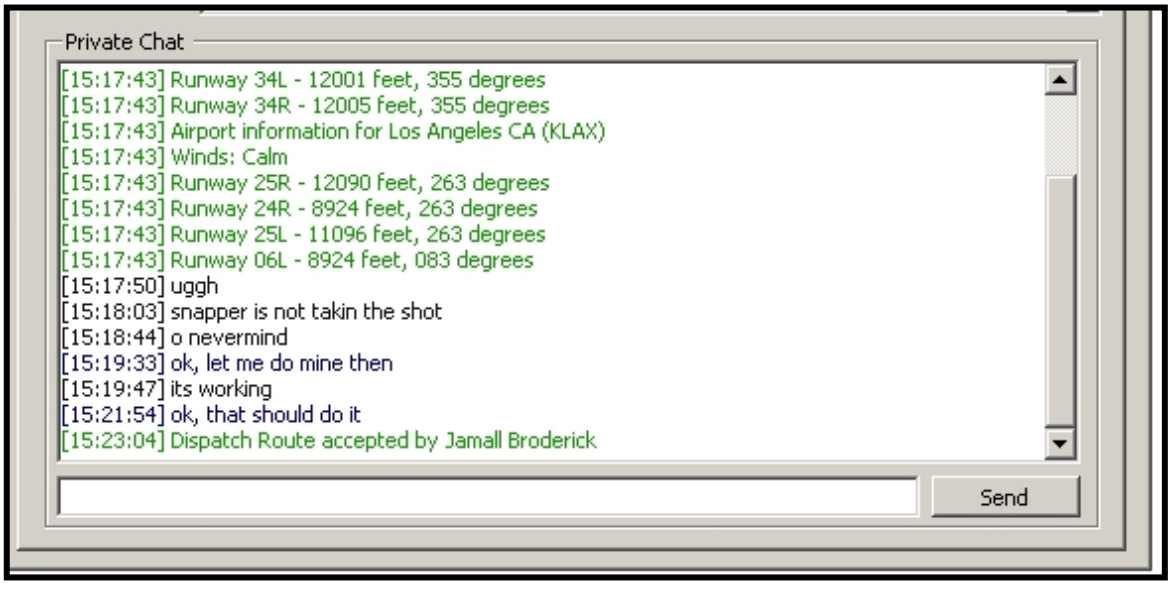


It really is that simple. Once you are online and see under the pilots list a person's name shaded in green, that's a dispatcher. Try it the next time you fly. You'll be amazed at how well it works.

In the near future, we plan on having Dispatch coordinate an event. Once implemented, you will log onto Vatsim and immediately contact the Dispatcher who will give you your route and squawk code (as coordinated with the local ARTCC). He will then function as a ramp agent and grant you push start and taxi to spot clearance. This will provide an added sense of realism to DVA group events.

Remember; if you ever get stuck, just ask for someone on ACARS to help you. Members of the DVA staff or other experienced pilots are always connected at one time or another. Special thanks to Jamal Broderick and Terry Kocher for assisting me in this endeavor, as you can see by the chat messages, we had issues...LOL.

Happy Flying! ✈



Mark Salter (DVA3787)
Assistant Chief Pilot, DVA CRJ Program

The most successful jet in the regional industry, the CRJ is an absolutely rewarding aircraft to get behind the yoke of. However, the seemingly small jet has multiple challenges the pilot must face, takeoff being the most notorious. I have compiled a list of some tricks that will help make the most out of your CRJ flight experience and definitely give you that edge needed to pass the checkride.

Trim Proper trimming of the elevators is essential to victory and safety during takeoff. If you do not have the trim freely available to use, then silently scold yourself! You should go to the assignments menu in flight simulator and assign the "trim up" and "trim down" commands to a key or button. The elevator trim wheel in the CRJ is rotated down or up and the pitch is affected respectively. The wheel should be rotated down until the white selector is about 3/4 the way down. The CRJ needs a little extra lift support to get her aloft. Upon reaching V1, the yoke should be smoothly pulled back just enough to establish a positive rate of climb. In the Wilco CRJ, the elevator trim can be viewed digitally under the STAT page. It is marked as STAB (Stabilizer). Trimming down to 6 is OK; just don't go past the green safety margin.

Payload The default weight for the CRJ in FS is overweight! It is imperative you correct this to comply with the manufacturer's recommended values. Remember, the MTOW (Maximum Takeoff Weight) is 51,000 lbs and the maximum landing weight is 47,000 lbs. The appropriate payload settings can be viewed in the Aircraft Operating Manual. There have been no accidents on record dealing with an overweight landing, but you shouldn't take chances. Airlines also don't like the costs of overweight landing inspections. Too heavy a CRJ will cause the aircraft to unsafely waste excessive amounts of runway. In the Wilco, make sure the PERF page of the FMS coincides with the total gross weight FS gives you.

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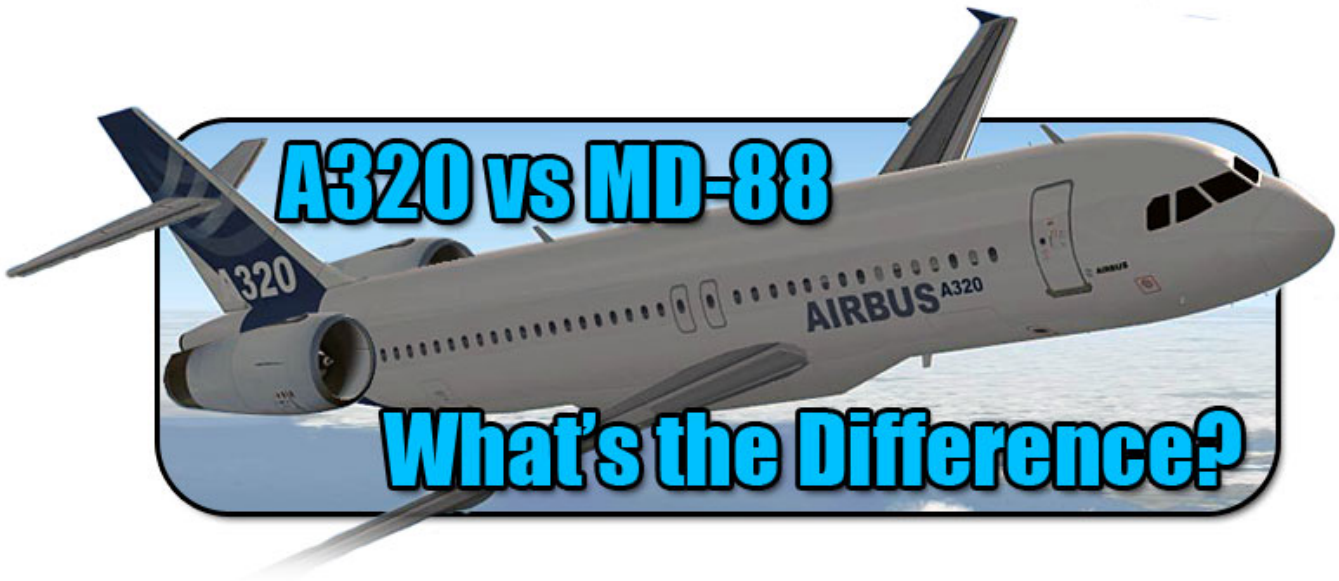
N1% Many CRJ pilot reports have an extravagant N1 percentage. With throttles pushed fully forward, the engines can easily break into the red zone at more than 100% N1. Aside from being completely unnecessary, this is extremely bad for the engines. I usually takeoff with 92% N1. A safe range is between 85%-95% N1. Some of the factors I consider when pre-planning my N1 settings are air density, runway length, and gross weight. The more dense the air, the more lift the wings can utilize to takeoff thus needing less thrust to do so. Density ties right in to temperature and air pressure. The colder the OAT (Outside Air Temperature) is, the more dense the air. A higher pressure also increases air density. On the contrary, if the air is less dense, there is less air available for the wings to gain lift, therefore requiring a boost in power. Sensibly, a short runway and a heavy aircraft may need more thrust for a safe takeoff. If using the Wilco, the FMS will calculate your N1 settings based on a variety of inputs entered on the PERF page. A reference bug will show up on the engine statistics screen indicating the proper N1 required.

Flaps We extend flaps during takeoff to increase the amount of lift the wings can get produce. Flaps also decrease the stall speed of the aircraft. The standard CRJ flap setting is 20 and should be set prior to taking off. You should retract the flaps based on some given conditions calculated during your pre-flight stage. You cannot retract the flaps until 1,000 feet OCA (Obstacle Clearance Altitude) and V2 + 20 knots, assuming you have flaps 20 set. An airport facility chart contains altitude markings for obstructions within the vicinity.

I hope this information will aid the massive number of questions regarding the CRJ takeoff procedure, improve those PIREPs, and clean up checkrides. For more questions, the CRJ staff is always available to offer help. We live an email away! ✈



Larry Foltran (DVA1679)
Chief Pilot, DVA A320 Program

As part of the merging of fleets between Delta and Northwest Airlines, DVA pilots can now enjoy logging flight time in the Airbus A320 and A319. After some time at the helm of the MD-88/90 program, I was flattered to be given the honor of being DVA's first A320 Chief Pilot. Needless to say I did receive some grief over this move from our more die-hard Mad Dog pilots, but it was clearly all in fun…or so I'd like to believe.

In reality, I felt I was making the jump from one very unique aircraft to another very unique aircraft, each on separate ends of the spectrum. During this transition, I found myself comparing how things are done on the Airbus's flight deck to that of the Mad Dog and quickly realized that I was learning a completely new animal. So when offered the opportunity to write in this edition of Delta Fly!, I decided to briefly cover what makes each aircraft unique and special and why having both in your virtual hangar can be a benefit.

First, let's look at each aircraft's flight control systems and how the flight crew controls the aircraft manually. I believe this is one of the most differentiating aspects when comparing these two pieces of aviation marvel. The MD-80 series of aircraft utilizes a set of yokes on the flight deck that are connected directly by cable to a series of control tabs. Unlike many other aircraft where the pilot moves the aileron directly, small control tabs are moved by the pilot, which in turn aerodynamically moves the ailerons. This requires much less force than that needed to move the entire aileron. A similar setup is also utilized for rudder movements.

In contrast, the A320 is a Fly-By-Wire (FBW) aircraft equipped with control sticks rather than the traditional yoke. Not all aircraft manufactured by Airbus are like this, but that's a topic for a different day. Pilot inputs via the control sticks are sent to a centralized computer system, which interprets the input and commands the control surfaces appropriately and in accordance with several different programmed governing laws. I believe it's safe to say that an Airbus pilot works with a computer to fly the aircraft even when flying without the direct aide of the autopilot.

Next, we have the use of the MCDU and other autoflight systems. A Mad Dog pilot will input a variety of information into the Flight Management System (FMS) via the MCDU, including fuel load, flight route, and other information. Other necessary information is inputted in a variety of other locations on the flight deck, such as the Thrust Rating Panel (TRP), the Take Off Condition Computer, and stabilizer trim indicator, to name a few. In the A320, all of the information necessary for the flight, including navigation radio settings, is inputted via the MCDU. It's basically one stop shopping in the "bus", but you have to be familiar with the menu structure or you'll definitely get lost.

Also related to the autoflight systems is the auto-throttle. On the Mad Dog, the throttle levers are physically moved by servos when the auto-throttle system is active. That's not the case in the A320. The A320's thrust levers actually have different gates, each with different uses. When taking off, the pilot moves the levers to either the TOGA gate or the gate designated for a Flex or Derated Take off. The aircraft's computer then adjusts the engine power accordingly for takeoff. While climbing out in the Mad Dog, the pilot will select the Climb power selector button on the TRP. If the auto-throttles are active, the throttle levers will move rear-ward to the decreased EPR limit. In the A320, the aircraft's flight system will direct the pilot to move the levers to the specific Climb throttle gate. Once the levers have been physically moved by the crew, the climb power is adjusted by the aircraft's computer system.

That brings me to an interesting aspect which I struggled with initially. A Mad Dog pilot can technically directly control engine thrust by moving the throttle levers back and forth. The A320 pilot commands increased or decreased thrust using the levers, which is then commanded by the aircraft's computer system. Similar results…different way of thinking.

Of course there are many other differences and areas of uniqueness in each aircraft. Way too many for me to cover in this short article. I still remember my first virtual flight in the Mad Dog (CVG to DTW) after spending hours and hours in T7s and 767s prior to that. It was a sense of something new and exciting. In fact it was very similar to the experience I had when I completed my first A320 flight after spending years with the Mad Dog. That being said, I do invite DVA's Mad Dog pilots to take the "bus" out for a spin if they're ever in the mood for something different. In the same token, I think the A320 pilots should give the Mad Dog a try because you may be pleasantly surprised. But be careful. That dog can bite. ;-)✈