

THE URBAN FLYER



NOVEMBER 2021 | FALL UPDATE

BRIEFING NOTES



Finally, A Recovery!

Fall is upon us once again, but this time the mood seems a little lighter. A few short months ago, it appeared as if the unrelenting woes of COVID19, and its devastating impact on aviation, had no end in sight! However, despite the flurry of negativity over the past 20 months, and the temptation to turn our backs on our beloved industry, finally, a recovery!

The height of the pandemic was unrelenting, and even for those of us who have witnessed 9-11, SARs, Bird & Swine Flu, the scale and destruction of COVID19 was on a completely different level. I encouraged each of you to **STAY MOTIVATED**, to **TRUST the PROCESS** and to continue your paths, however, the mere glimmers of hope and optimism appeared faint at times, and in some cases, failed to shed light on the unsurmountable obstacle placed before us.

“Tough times never last, but tough people do” and I am thankful to those that were able to dig deep and make it through one of the darkest times aviation has ever faced. Fast forward 6 months, from our last conversation, and you can’t help but notice the tremendous boom aviation is experiencing. At the very top we see companies like Air Canada returning to positive cash flow, and some of its peers even returning to profitability. Companies such as Jazz have recalled all pilots and flight attendants and hiring at many carriers is no longer a wish, but reality. You can imagine my delight when I read that WestJet Encore, one of my former employers, is now hiring pilots having just 250

THE FLIGHT PLAN

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From the Captain's Chair

The Debrief

hours of experience!

In this edition, as we dust off our books and uniforms, focus on recovering, and a return to normalcy, I strived to provide stories and perspectives that connect with all of us. We continue with our perspective series and hear from individuals at different stages of their career. Specifically, we hear what the recovery looks like for them. Also, as we all start flying more, it is imperative that we reiterate safety. As such, I am introducing a new safety series that highlights key real-life events and key takeaways that can benefit all of us. We also take time to have some fun with a newly introduced Airbus vs Boeing series that aims to settle the longstanding debate of which manufacturer produces the best aircraft. The answer is obvious, but I will leave you, the reader, to decide.

So, as you can see, we have lots in store for you and I sincerely hope that you find something that resonates. By no means am I naïve to the fact that pandemic is over, it's not. Nor am I blind to the notion that the recovery does look different for everyone. I am sympathetic that some still patiently await a callback and that the long-lasting financial impacts of COVID19 have forced some of our peers to put their aviation aspirations on hold. However, I am optimistic that the future is brighter than ever and I still proclaim that this is the best field in the world.

HAPPY READING!

*Damar Walker
Airbus A320 First Officer
Urban Flyer Editor
Secretary & Aviation Camp Director*

MEMBERSHIP UPDATES - FALL 2021

NEW MEMBERS

A special shout out to our newest members! Please join me in extending an extra warm welcome to the most recent additions to our UPN Aviation Family!



MEMBER ACCOMPLISHMENTS

Despite the many challenges and the grim outlook over the past 20 months, our members continue to push and accomplish great things! We are so proud of all those that continue to progress amidst one of aviation's darkest hours. Congratulations on your accomplishments!

Maurice McRae
Completed IATRA
FO @ Skylink on B1900

Aiden Parkins
First Solo

Karl Loken
Top 40 under 40 Wings cover

Allison Couch
Wings feature article

Andrew Winchester
Fully certified AME

Angeline Ram
Promoted to full PHD Researcher at
the University of Waterloo

Chioma Okoro
Second place in the Royal
Aeronautical Society Young Persons
Network Canada Presentation
Competition

Joseph Kiige
IFR written exam

Andrew Parker
PPL Flight Test

AVIATION PROFESSIONALS

Joseph Kiige

Ryan McKenzie

George Gitungo



Jakim Gill
CPL written exam

Stefan Peart
Completed IPPC on CRJ200/900 @
Jazz Aviation

To all of our members, please keep us up to date on your accomplishments. Continue to reach out to us via WhatsApp, or if you prefer, send us an email at urbanpilotsnet@hotmail.com. We love hearing from you!

SQUAWKBOX



AIR CANADA

FIRST ALL CIVILIAN CREW IN SPACE

On September 15th, SpaceX made history with the launch of Inspiration4, the first all civilian mission by a private spaceflight company. The mission was powered by a Falcon 9 rocket with a Crew Dragon spacecraft (resilience) housing the 4 civilian members. The trip lasted 3 days and orbited as high as 575 km above the earth prior to splashing down off the coast of Florida. Unlike professional astronauts that spend two years preparing for their space mission, the timeline for this crew was only 6 months. SpaceX hopes that Inspiration4 opens a new era where everyday people can visit space.

AIR CANADA RETURNS TO CASH FLOW POSITIVE

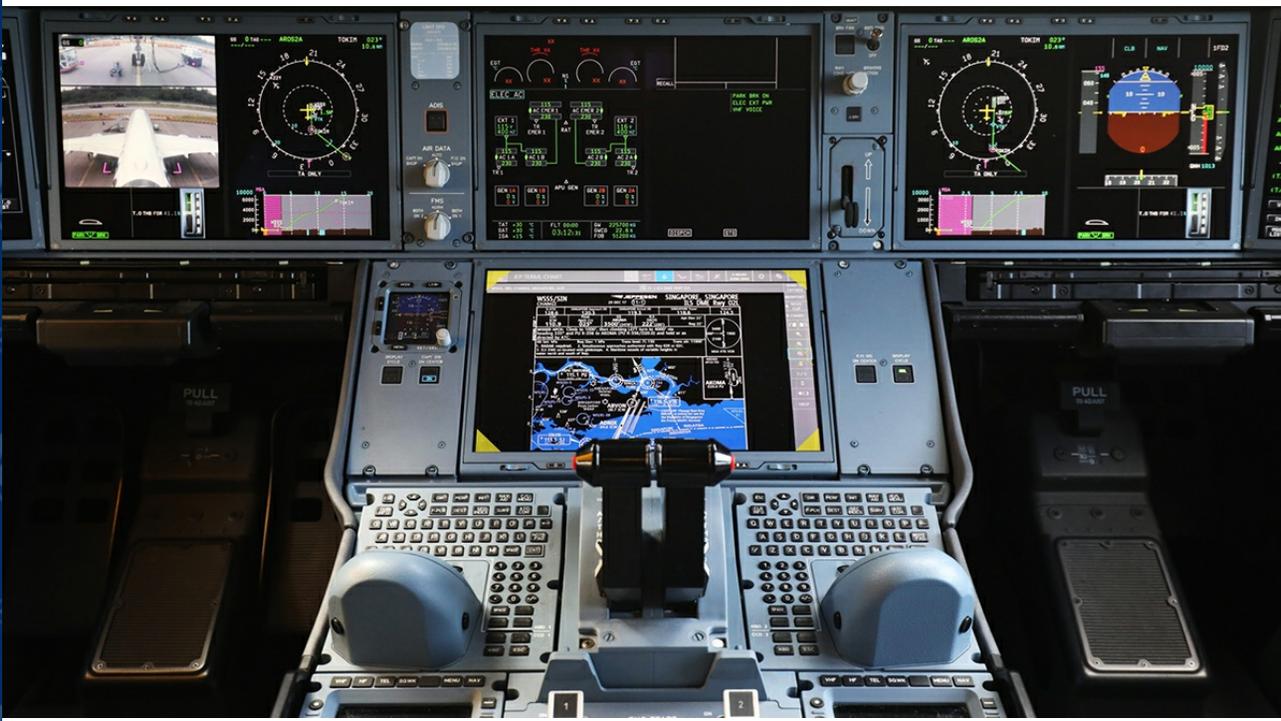
On November 2, 2021, Air Canada reported a net cash flow of C\$153 million, which exceeded the C\$280 – C\$460 million cash burn expectation. Year over year, Air Canada has nearly tripled revenues, narrowing its losses from C\$1.1 billion last year to C\$649 million this year. Leading the charge was cargo, which has already earned C\$1 billion for the carrier this year, a record for the company. Although business traffic still lags, Air Canada is experiencing an overwhelming demand for premium leisure. They are also seeing strong demand for domestic, transborder, sun destinations and transatlantic flights, with the Pacific being the only lagging segment, hampered by a myriad of restrictions. Fourth quarter traffic is expected to see a 135% increase from 2020, which represents a 47% drop from 2019.

IAG LOOKS TO NEXT SUMMER FOR FULL RECOVERY

IAG, the parent company of Aer Lingus, British Airways, Iberia and Vueling, just reported its first 3-month period generating cash, since the pandemic began. The future is looking quite bright for the group as they aim to fully restore their 2019 capacity by the summer. With Ireland, the UK and the US easing their restrictions, there is a much clearer pathway to recovery. Arguably, the easing of US travel restrictions will have the most significant impact, since the North Atlantic is one of the group's most lucrative markets. This is confirmed by their advanced bookings for Caribbean and North Atlantic travel, exceeding 2019 levels in November. With the strong anticipated demand, the group of airlines expects to recall all furloughed employees and begin hiring in the fourth quarter of this year. Pre-pandemic, Norwegian accounted for 8 percent of the total North American traffic out of London. Since Norwegian has given up their long-haul network and the capacity has not been filled by other airlines, the group plans to capitalize on this. As with many of their peers, they are witnessing increasing demand for premium leisure travel. If the trend continues, they will adjust their seating configurations on aircraft due to be delivered in 2024 and later, to accommodate.

GARMIN INTRODUCES SMART GLIDE

In July, Garmin introduced Smart Glide, a safety tool to assist pilots and reduce workload in loss of engine power emergencies. Smart Glide joins Autoland as part of the Autonomí family of autonomous flight technologies. When activated, Smart Glide aids the pilot by recommending a suitable airport estimated within gliding range, provide critical info to the pilot, and optimize select avionics settings. When paired with a compatible autopilot, Smart Glide is able to pitch to best glide speed, while navigating the aircraft within the vicinity of the selected airport, so the pilot can perform the approach and landing.



SINGLE PILOT CREWS, THE LONG-TERM FUTURE?

Airbus has high hopes for single pilot cockpits on long-haul routes. In partnership with Cathay Pacific, this move would place one pilot in the flight deck for most of the time. So, instead of having crews consisting of 3 or 4 pilots, this number would be reduced to 2 pilots, who would rotate to receive their required rest. This move is purely being pursued to save costs since 25% of aircraft costs are related to personnel, with crews making up 13% of that. Airbus states that safety is its top priority, and it will not compromise it for the sake of this program. As such, they will be taking their time with this endeavour to ensure that the technology continues to develop in a way that makes single pilot operations conducive.



THE A380 IS MOUNTING A COMEBACK

British Airways, Singapore Airlines and Qatar Airways are set to return at least a portion of their parked A380s to service by mid-December 2021. For British Airways, it marks an upgrade of their 777 Hong Kong service. Destinations such as Frankfurt, Madrid, Dubai, Miami, and Los Angeles, should be upgraded to A380 service before the end of 2021. An additional 4 destinations will be served by the 380 prior to the end of March 2022. Singapore is on a similar trajectory and will be adding 12 A380 routes between November 2021 and January of 2022, serving destinations such as London, Delhi, Osaka, and Sydney, to name a few. Qatar's story is a different one, and their resumption of A380 service seems to be the most surprising of the bunch. Although the CEO has called the A380, the airline's biggest mistake, due to 13 of their A350s being grounded with paint/composite issues, Qatar will be reactivating 5 of their 10 A380s, to have enough capacity come Christmas. The return of 380 service among various airlines is a clear sign that airlines and passenger demand are recovering worldwide.



QATAR GETS G700 PREVIEW

In August 2021, Qatar Airways received a preview of the world's first ever G700, which it is set to debut in 2022 as the aircraft's launch customer. The airline has 10 examples of the aircraft on order, which operate under its executive airline branch. The G700 is a large cabin business jet equipped with Rolls Royce Pearl 700 engines and able to operate at Mach 0.85 for 7500nm/13,890km or at Mach 0.90 for 6400nm/11,853km. It boasts an ultra-modern flight deck that consists of large touchscreens and very few buttons. The cabin is extra spacious among its class, and brightened using 20 examples of Gulfstream's signature large oval windows. Purchasing this jet, with a standard interior, starts at \$78 million USD.

The SpaceX logo, featuring the word 'SPACEX' in a bold, sans-serif font with a stylized rocket tail fin graphic extending from the 'X'.

BROKEN TOILET ON SPACEX CAPSULE LEAVES ISS CREW USING DIAPERS ON RE-ENTRY

On SpaceX's most recent mission, involving their Crew-2 capsule, an out of service toilet forced the crew to use diapers on their return to earth. As such, the astronauts were faced with an interesting dilemma if they had to go; hold it or resort to their flight suits. Although the spacecraft is quite advanced, being the size of a small minivan, it does not possess a proper bathroom. In lieu of, it utilizes a toilet device made up of a tube and fans, to ensure waste travels in the right direction. A leaky tube was discovered on Inspiration4's capsule, which leaked into a fan and sent urine under the capsule floor. The same issue was discovered with the Crew-2 capsule, and as such, engineers feared corrosion would be an issue with the capsule's aluminum parts, due to the mixture of fluids with Oxone. After a range of experiments and results that were approved by NASA, corrosion was ruled out. As a precaution the toilet was off limits for the return. A fix for the issue has since been found, which will be implemented on all Dragon Capsules and future missions.

The WestJet logo, featuring the word 'WESTJET' in a bold, blue, sans-serif font with a stylized green maple leaf graphic to the right.

**WESTJET ENCORE HIRING
250 HR PILOTS**

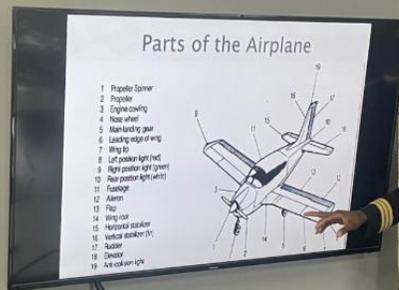


QANTAS PERFORMS LONGEST EVER COMMERCIAL FLIGHT

On October 5th, 2021, Qantas used a Boeing 787-9 out of Buenos Aires to operate its longest ever commercial flight, landing in Darwin, Australia after 17 hours and 26 minutes in the air. The flight served as a repatriation of Australian Citizens from South America on behalf of the Australian Department of Foreign Affairs and Trade. The flight carried 107 passengers and the crew consisted of 4 pilots and 17 other crew members, made up of cabin crew, engineers and ground staff. The project sunrise flights between New York and London to Sydney were technically longer but passenger seats could not be sold on those flights. As such, this flight between Buenos Aires and Darwin is their longest ever commercial passenger flight. This flight was made possible in part, due to Qantas' 787 ETOPS 330 rating, which allows the aircraft to operate 330 min away from a suitable alternate/diversion airport.

On November 8th, 2021, WestJet Encore announced that they are accepting pilots with 250 hours Total Time. In addition, they also require 100 hrs fixed wing Pilot In Command (PIC) time and completion the IATRA or SARON and SAMRA, with possession of an ATPL being preferred. For those who are short on time to meet the ATPL PIC hour requirement, they are offering up to 200 hours utilizing the Pilot In Command Under Supervision (PICUS) program, which will yield 100 hours in flight time credit. For many UPNers, this represents an incredible opportunity to get into the regionals and for the industry, it a welcomed sign of the overall recovery. It is highly recommended that anyone meeting these requirements apply.

CAMP IS STILL IN SESSION



- 1 Propeller Spinner
- 2 Propeller
- 3 Engine cowling
- 4 Nose wheel
- 5 Main landing gear
- 6 Leading edge of wing
- 7 Wing tip
- 8 Left position light (red)
- 9 Right position light (green)
- 10 Rear position light (white)
- 11 Fuselage
- 12 Aileron
- 13 Flap
- 14 Wing root
- 15 Horizontal stabilizer
- 16 Vertical stabilizer (V)
- 17 Rudder
- 18 Control
- 19 Anti-collision light

Spring and Fall Camp 2021

This spring we were fortunate to host another aviation camp in partnership with Youth Taking Flight. The 4 Saturday camp, which ran from April 10th until May 22nd, was originally planned as an in-person course for ages 11-16. The intent was to deliver the course in a ground school format, discuss aviation related careers and teach basic flying concepts that would allow all participants to feel confident flying a circuit in a Cessna 172 using Microsoft Flight Simulator.

Due to last minute constraints, because of the pandemic, this course had to be delivered exclusively online via ZOOM. As such, the team was forced to pivot, and due to the lack of fidelity, the Flight Simulator portion was dropped. Irrespective of, the students were equally engaged in the program and its delivery. We



were able to adequately adjust the program to make it just as enjoyable via online format.



With the success of the Spring Camp, our Youth Taking Flight partners were able to receive additional funding for the fall. The good news is that, based on relaxed restrictions, we were able to provide the Fall session in person, and with flight simulation. Taking away from the lessons learned in the Spring, we tweaked our delivery and are currently providing a full camp program. This session runs from October 16th to November 20th and is composed of 4 Saturdays that are exclusive to UPN.

The best part of programs like these is seeing the excitement and engagement of the students. It is truly amazing presenting career paths in aviation for those that never thought these careers were possible. As restrictions ease, we can look forward to more programs like this, built with interactivity in mind, to bridge the gap between the urban community and the aviation community.

*Damar Walker
Airbus A320 First Officer
Urban Flyer Editor
Secretary & Aviation Camp Director*

MAKING IT IN TODAY'S INDUSTRY (Career Mentorship)

As pilots transition in their careers to different companies and to larger equipment, job opportunities will continue to present themselves. If you find yourself in the position of searching for the ever-so crucial 1st job, wishing to get your career started and eventually employed at one the major airlines, I say to you, keep going, keep moving forward! Don't give up, regardless of



Are you thinking of becoming a pilot or further progressing your aviation career? Now is the perfect time to do either, believe it or not! The journey will not be easy, and it will certainly be expensive, no doubt, however it is very achievable! If you are willing to put in a lot of hard work and make the required sacrifices, you will be able to see this goal all the way through.

As the cloudy skies of COVID19 begin to dissipate and we, as a community, enter a new phase of living – the post pandemic world – I am reminded of a time, not too long ago, when aviation looked bleak. In the early 2000s, the September 11th terrorist attacks, Swine Flu, and the wars in Iraq and Afghanistan, dominated the world's attention. It was a tough time in aviation, there were few jobs for young pilots starting off in the game; companies were asking for time requirements that were impossible to obtain, and the hope of achieving that ever-critical, 1st time building job, seemed unattainable. Déjà vu, today, the job opportunities seem few and far between and the dream appears to

how difficult it may seem in the moment. You might be feeling: “Sure, easy for you to say, buddy! You don’t have to worry about finding the money to complete the training, pay my bills, eat! I’m working 2 jobs and I have bills to pay!” Yes, you’re right, it is easy for me to say this – now! But back in the day, I too, went through the same struggles of trying to complete my flight training while working multiple jobs, paying bills, and finding money for groceries.

Forget calling this a rite of passage, call it the grind! Many times throughout this journey, you will simply have to do what needs to be done to get to where you wish to be. Take advantage of what you can, where you can, keep your grades up to take advantage of scholarships, keep busting “your hump” working to pay for training. For those that aren’t currently able to afford to fly, study hard and write the exams – get those out of the way.

Equally as important, develop relationships with people in aviation. Also, stay connected with your fellow UPN members; you never know where a chance encounter or conversations with people will lead. Remember, aviation is a small community and there is a strong possibility that someone knows you or knows of you.

All this to say, many aviators before you faced the same challenges mentioned above. Those who persevered and continue to persevere have reaped the fruits. There is a bright future in aviation, so keep inching forward, keep grinding and you’ll get there. You can do it!

Captain William C. Batson
Airbus A220 Captain
Manager of Line Operations - YYZ

be just as impossible to attain. Yes, there is a familiarity between then and now but that's the bad news.

Here's the good news! As the situation back then did improve, aviation is once again progressing in the right direction. Companies are recalling their furloughed employees; some are even hiring!



UPN SOCIAL 2021!

Members, please mark your calendars for November 27th @ 1800, as we prepare for our social at Island Mix in Vaughn. Due to COVID 19 restrictions, we are limited to a total of 50 seats. It has been almost 2 years since our last social, so we are sincerely looking forward to see you face to face. For those who have not yet registered, please feel free to do so at the Eventbrite link below.

RSVP TODAY!!

MEMBER SPOTLIGHT

Once the snags are approved, I choose from, among the lot assigned to me, and work them out one



The role of an AME is one of the least understood professions in Aviation. Whenever asked about my career, facial expressions have often gone from “impressed” to “perplexed” after I’d explain that I am a licensed, “E”-rated, Aircraft Maintenance Engineer at Flying Colours Corporation in Peterborough, Ontario.

While section 101.01 of the Canadian Aviation Regulations (CARS) defines *maintenance* as, “the overhaul, repair, required inspection or modification of an aeronautical product, or the removal of a component from or its installation on an aeronautical product”; *engineers* (from Latin, *ingeniare*: to design, devise) are universally described as skilled individuals who create and analyze complex systems or things to solve a problem. Aeronautical engineers create the designs, but Aircraft Maintenance Engineers interpret and apply those designs to ensure and certify that all maintenance performed on an aeronautical product was done in accordance with the applicable standards of airworthiness.

The aircraft maintenance field is rather diverse and can be broken down into 3 main categories: aircraft systems (M1/M2), electrical/avionics (E), and structures (S). I chose the avionics route, and I obtained an “E-rated” AME license on July 8th, 2021.

at a time. First, I access the appropriate AMM (Aircraft Maintenance Manual) to learn about the faulty system’s description and operation, and then access the WD/WM (Wiring Diagram/Wiring Manual) to aid in continuity checks and fault isolation. Once power and grounds are verified, the problem is usually isolated to a component or LRU (Line Replaceable Unit). With redundant systems, components or LRU’s are usually swapped (i.e., system 1 with system 2; left side with right side) and if the fault follows, the defective component or LRU is removed from service and a form for a new replacement is submitted. In cases where the fault doesn’t follow, further continuity checks are carried out and a process of elimination approach is applied. Sometimes it’s a broken wire or pushed-back/damaged pins. I have even seen problems due to unseated connectors. A general rule of thumb is to never assume the same cause discovered, or corrective action implemented, on a similar snag prior to the one in front of you. Effective troubleshooting is most efficient when done correctly the first time around.

I am presently working toward an M2 rating for my AME license seeing as I’ve graduated with accreditation in both Avionics and Aircraft Maintenance programs at Centennial College in 2018 and 2019

Life as an AME can be trying at times, but I enjoy a good challenge. Troubleshooting faulty systems are, by far, my favourite type of tasks on the job. When the aircraft arrives, an incoming inspection is carried out to verify the satisfactory operation of various systems. Discrepancy reports of the faulty components/systems discovered during the incoming inspection and/or from the flight crew are submitted for customer approval, and then the real fun begins.

respectively.

Andrew Winchester
Aircraft Maintenance
Engineer

PERSPECTIVES

The Recovery (Part 1)



I was fortunate to have the opportunity to return to the restaurant job which I had previously, while in high school, to make sure I had steady income. In my free time, I rented a Cessna so I could build my pilot in command time, while I was on inactive status with the airline. Even though I was motivated to continue to build my flight time and think optimistically about the outcome for our industry, it was the most challenging seventeen months of my life, mentally and emotionally. Many times, I had to lean on family and friends, including UPN, to relieve the stress of watching an industry I adore, struggle and flounder through the worst downturn aviation has ever seen in its history. As the months passed with no immediate end in sight, my hope of a recovery dwindled, and my optimism teetered on desperation at times. It was challenging, trying to find the smallest glimmer of hope for the industry's return.

I got The Call. I had been dreaming about this call for my entire life. On February 17th, 2020, I was hired by Jazz Aviation as a Calgary based First Officer flying the Dash-8 100/300 after

After what felt like an eternity, we finally heard news in early summer 2021, that Jazz would be recalling about 200 pilots. At that time, I was still too low on the seniority list to be included in the initial recall, but it was the positive sign I had been longing for, to know we were finally seeing the light at the end of the tunnel. In mid-August we finally got word that effective August 29th, all remaining inactive Pilots with Jazz would be recalled to active status, almost instantly. The 17-month burden melted away

graduating from Western University's Commercial Aviation Management program. Little did I know, at the time, my elation would be short lived, as COVID19 overwhelmed the world four weeks later.

During my initial training, we all started to hear the rumbles of what was to come, and the grim reality started to sink in. The reality that it would not be long before we would be laid off. Then, so said, so done. I finished my training on the Dash on April 10th and I was placed on inactive status by May 1st. As the seriousness of COVID19 mounted in Canada, I realized we would not be back to work any time soon, but that did not stop me and many other pilots who lost their jobs, in the height of the pandemic, to fight for their careers and have hope for better days to come.

instantly and things progressed quickly, with significant changes to the fleet and operations. Surprisingly I was reassigned to fly the CRJ 200/900 out of Toronto and went straight into training one week after notification of my reassignment.

The pandemic of 2020 shut down the world. It forced us to rethink how we lived and worked. It made me appreciate many things I use to take for granted. Family support in a time of crisis, for one, and the realization that no job is guaranteed! However, if you apply yourself and do the work well, what is meant for you, will be for you! Though we never know for sure when it will come, keep persevering till that day. As all things come to an end, both good and bad. So, enjoy the days when they are good, and have faith and a plan when they are bad. Above everything, fly safe and keep the blue side up!

Stefan Peart
CRJ200/900 First Officer

FLYING TAUGHT ME THIS (Aviation Safety)



Countless times, when I instructed Multi IFR candidates, arguably one of the most challenging phases of flight training, students often struggled with aircraft handling and the basic IFR scan. This was often traced back to their poor grasp of *attitudes and movements* which was lesson 5 of the PPL curriculum. Regardless of how early it was taught, a full grasp of these concepts is that important!

Attitude plus power equals performance: that applies equally as much to a Cessna as it does to my Boeing 787! For those of you working on their MULTI IFR, I still use, “dead foot, dead engine” during my V1 Cuts on the 787 as part of my strategy to identify a failed engine. It also helps me to SLOW DOWN and methodically FLY the AIRPLANE first and prioritize all

It is a pleasure to be asked to communicate with all of you via this newsletter. I hope this finds you all well and healthy, most especially. Many of you know me personally and it has been nothing short of an honour to be associated with such a fine group of aviation professionals and enthusiasts. For those of you that don't know me, I have the privilege of being a First Officer at Air Canada, since 2006, and for the past 4 years I have been qualified on the Boeing 787 Dreamliner. Very briefly, my background in aviation includes having flown a variety of aircraft from single engine piston to multiengine piston and jet aircraft. My entry into professional aviation was, like some of you, as a flight instructor. Initially I taught on single engine general aviation aircraft and eventually on multi-engine piston IFR trainers at Perimeter Aviation. While I'm not currently an active instructor, I look back on it with great pleasure and attribute many of my best qualities as a pilot to the experience I gained in that role. To that end, I hope you will find some of my shared insights useful at any stage of your career.

When I was asked to contribute an article for UPN, on the topic of aviation safety, I had any number of thoughts and experiences that I mused through. I recognize that most of our members are still in the early to mid-stages in their aviation career, so it is to them I'm mostly trying to address, however I hope these few words will still prove useful with all our pilots, regardless of where they are in their career.

There are two areas of focus that I would like to touch on. Full transparency, they have less to do with outright aviation safety and more to do with making YOU a better aviator. A better pilot is after all a safer pilot.

Besides, there is an abundance of

else second.

"Aviate, navigate, communicate!" Is another basic catch phrase you learn early in your aviation training, and I can assure you it applies and is even MORE important when you are flying a jetliner or high-performance aircraft that can easily do well over 250 knots with one (or more) failed engine.

So, if you are still in your early phases of your flying career, I strongly encourage you to seek to really understand all aviation fundamentals. Resources like your POH/AOM/FCOM, the AIM and yes even dust off your From the Ground UP. These are all invaluable resources to use and represent core material texts for a reason, regardless of your flight experience. That time and money spent is an investment, whether you are an aspiring professional pilot or an enthusiast.

This is a nice ingress into my second topic of focus and that is your piloting **STANDARDS** or more specifically *raising your piloting STANDARDS*.

While I was preparing for my first PPL flight test, as the time drew nearer and I became more nervous, my instructor at the time (and in every flight test prep leading into any flight test) took me aside and explained to me the standards I would have to maintain to successfully complete my flight test. Among them were Altitude +/-100 feet, Airspeed +/-10 KIAS, Heading +/- 10 degrees. Most of these were pretty much universal for most flight tests back in my day and I assume they remain so up until today. These are a lot of parameters to remember, so instead of dedicating limited brain capacity to memorize all these figures, cultivate the piloting discipline to *raise your piloting standards*. Instead aim to maintain your altitude +/-50 feet or better +/- 20 feet, or even +/-10 feet! Airspeed +/- 2 KIAS and heading +/- 2 degrees! In smooth

aviation safety-related material a mere web search away and I assume that many of you have already been exposed to a myriad of specific safety related information from the moment you started your private pilot (PPL) ground school. Perhaps, stating the obvious, but the PPL is THE most crucial stage to becoming a successful pilot. Whether you aspire to become a professional pilot or not, I assure you, if you cultivate these two qualities, the returns will be many fold.

The qualities I speak of are obvious but powerful in their application: they are raising your PILOTING STANDARDS and comprehensive learning of AVIATION FUNDAMENTALS. Let me start with embracing AVIATION FUNDAMENTALS.

Embracing aviation fundamentals is simply focusing on the topics you learned, and the skills gained in the private pilot curriculum. Topics such as Air Theory and The Four Forces of Flight. The basics of MET (meteorology) that go beyond just the reading of METARs and TAFs and looking at GFAs. For example, the relationship between temperature and dew point and how they are impacted and influence over land and over bodies of water near airports such as Billy Bishop (CYTZ). What happens to the weather when we go from day to night or night to day? Or do you remember phrases taught early on such as "*Attitude plus Power equals Performance.*"

Why is it important to maintain this knowledge and these skills? Well, as the term implies it forms the FUNDAMENTAL BASE upon which you continue to build your knowledge and skill sets as you advance in your aviation career. And while the technology continues to change and evolve, the basics upon which they are based, with rare exception, do not. This is vitally important to realize.

air I assure you this is achievable, quite easily really...that is...if you've really understood the fundamentals of *Attitudes and Movements* (insert smile). In less than smooth air, I can also tell you this is easier to do than it may sound, *IF* you set the proper *Power plus Attitude* (dramatic pause for effect). I think you get my point.

Kidding aside, when I'm talking about raising your piloting standards, I'm not just speaking about aircraft handling and piloting skills, although I think you can all understand why I'd say that's a big part of it. I think you can now see I'm also talking about taking the time to do a few deep dives into those aviation fundamentals I referenced earlier. The goal strived for when building your skills and knowledge and raising your piloting standards, while not necessarily "mastery" per se, should be beyond a basic competence. In my martial arts training, my teacher once told me, my aim in learning a technique was not to train it until I get it right but rather train it to a degree that I *could not* perform it wrong! I'm advocating that we as aviators strive for that. Whether or not we achieve it, I can promise you that level of investment made will reward us many fold. Imagine going into any flight test (CPL, IFR, etc.) knowing you already have achieved a level of skill that exceeds the test standards. Moreover, imagine your confidence as a pilot knowing you can fly to that standard. A better pilot *IS* a safer pilot.

Learning, fully embracing and consistently reviewing the basic *aviation fundamentals* and *raising your piloting standards* cannot be stressed enough. Moreover, once you get to a high professional level like a major airline, you realize, often too late, that opportunities for hands on stick time becomes a rarity and the fundamental knowledge and theories that gets you here, unless reviewed, degrades, and impacts your airmanship and your hard-earned flying skills. That my friends, is

a true shame and a danger to us all.

Stephan William Alexander
Boeing 787 First Officer

AIRBUS vs BOEING

AIRBUS



AUTOTHRUST

There is a saying, sort of, among us pilots that “In thrust we trust”. Of all the major aircraft manufacturers, I would like to take this time to talk about one,



AUTOTHROTTLES

So, you’re saying, I get to fly an airplane that manages thrust demand FOR ME?!

Cue in, Boeing’s Autothrottle system! Like any modern-day jetliner, the Autothrottle provides great relief for flight crews instead of manually adjusting thrust levers constantly in the air - especially on long sectors. On Boeing aircraft, there are no “specific positions” for thrust

Airbus has a unique concept regarding how we aviators send tons of metal and composites hurtling through the skies. This system is called, Autothrust.

The positions, with detents and stops, on the thrust lever quadrant, from the top down are:

TOGA - takeoff/go around (stop)

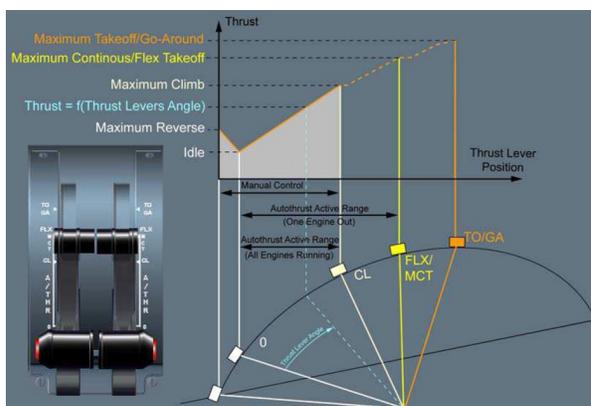
FLX/MCT - flex/maximum continuous thrust (detent)

CL - climb (detent)

FWD Idle - (stop)

Idle reverse

Full reverse - (stop)



During the takeoff run, the thrust levers are set to either the FLX/MCT detent or the TOGA stop position. Once the aircraft reaches the acceleration altitude, usually 1000 ft above the airport elevation, the thrust levers are pulled back to the CL detent and usually remain there for most of the flight. In putting the thrust levers in this detent, the autothrust (A/THR) system activates and controls the amount of thrust needed for all phases of flight (climb, cruise, descent, approach) based on what the pilots inputted into the Multipurpose Control and Display Unit (MCDU) during pre-flight. In an engine out situation, MCT is usually set, instead of CL, on the operating engine.

A/THR is normally disconnected once the thrust levers are pulled back to the FWD Idle stop during the landing phase. The system can also be

management, like on Airbus aircraft. However, if you were to firewall the thrust levers all the way forward, like an older piston airplane, you would degrade the engine life faster if done repetitively. In more advanced aircraft, there is a system called Full Authority Digital Engine Control (FADEC). This consists of a digital computer, called an electronic engine controller (EEC), which optimizes performance, improves safety, and ensures the engines perform more reliably. The Autothrottle only takes over control of the engine systems before takeoff (via a switch) and can provide automatic thrust control through all phases of flight. The Autothrottle is just one part of the system. It's connected to the Autopilot Flight Director System (AFDS). On the actual thrust lever quadrant itself, there are two switches: 1. Take-Off and Go-Around Power (TOGA), and 2. Autothrottle (A/T) disengage.



disconnect in flight using a red pushbutton on either side of the thrust levers, called instinctive disconnects. The desired thrust can then be set by manually moving the levers between CL and FWD Idle. Unlike conventional aircraft, in modern airbus aircraft, the A320 Family and onward, the thrust levers do not physically move on their own. They must be manually moved into the detents and stops mentioned above, during the applicable phases of flight. This is called the non-back driven thrust concept. Pilots can monitor the energy of the aircraft using the speed cues on the PFD, engine parameters on the E/WD or by utilizing the HUD chevrons, if equipped.

The A320 was my first jet and the first reliably automated aircraft. During sim training, I had to suppress the urge to move the power levers to the position I needed them to be in, but I was told I can trust the A/THR system. Based on several *unique* experiences I've had with older automation systems, think of me trying to stop a machine from Skynet doing something dangerous, I had a tough time trusting. In addition to my fear of the system doing a poor job, I was concerned that I was going to lose a vital aviation skill. Eventually, I grew to appreciate how effective and easy this system is. My workload during approach was drastically reduced and depending on the captain I was flying with; I could do an A/THR off landing to maintain my hands and feet skills in accordance with company SOPs.

In using autothrust as it is intended, I am able to focus on flying the aircraft the way it was intended. As a result of this, I have impressed many captains and passengers with my aircraft handling. Let's just say, lots of butter has been laid on runways and many "a props" were given. All in all, I think autothrust is a benefit to the safe operation of an aircraft. Big ups to Airbus for this forward-thinking idea.

Ever pass by a cockpit and seen those massive calculator-looking screens by each of the pilot's knees? These are called Flight Management Computers (FMCs). During the flight planning stage, before engine start (while passengers are boarding), the pilots input calculations into the FMCs. These calculations are with regards to takeoff power and the parameters that dictate the flight. The FMC tells the Autothrottle and Autopilot System to limit the amount of power inputted by the pilot, thereby creating an extremely efficient system.

Even though some companies encourage hand flying, the use of Autothrottle reduces your workload and makes flying that much more enjoyable. That doesn't mean you're off the hook though! You still you have to monitor your airspeed to ensure the automation is doing what you are telling it to do and within parameters. Flying a jet is all about autopilot and automation management, not so much hand flying. If the automation isn't doing what you told it to do, just disconnect it with a push of a button and HAND FLY IT to correct it! It may not be as simple as using the Autothrottle, but it sure will give you a greater appreciation for it!

Andrew Persaud
Boeing 737 First Officer



PERSPECTIVES The Recovery (Part 2)

Hello, my name is Samuel, and I, like you, am an aviation enthusiast. When I was a kid, nothing could separate me from my beloved window seat whenever my family and I traveled. Something about the feeling of taking off and getting higher and higher off the ground; the sheer sense of scale you get as you look on from a few dozen thousand feet at cities that now look like Lego buildings.

I was overjoyed to start my journey into flight training; being at the controls of a plane myself? That's more than I would have ever imagined! From disbelief to acceptance, paralyzing confusion to calm confidence, I've experienced the full gamut of emotions in small airplanes! One thing that remains constant however, was the unshakeable sense of marvel I've felt while flying over landscapes and views that frankly, are unique to a perspective when you are at least a couple thousand feet up.



Not only that, but every single instructor, lecturer, retired airline captain that came to talk to us praised this as the single best time in history to get into aviation. We heard countless stories about young captains in the 80's or 90's doing weeks-long road trips in the north and west, handing out resumes while living out of a 15-year-old minivan. Or spending 2 years as a dockhand, hauling cargo in freezing temperatures, working hard to get noticed and one day given a chance as a pilot. Well, that was not going to be our fate! Pilot shortages had made it so that the road-tripping days were a thing of the past. We even had 703 and 704 operators come to the school handing out business cards; telling us to get in touch once we neared the end of our training! It was amazing, unheard of even: we were in the Fastlane to a "frozen" ATPL with employers waiting for us at the finish line!

Well, as the saying goes: "if it looks too good to be true, it probably is". About three quarters of the way through my program, the school I was attending went belly up. They ran into money troubles, were unable to uphold the Flight Training Unit requirements and

had their operating licence revoked. Cue months of paperwork and waiting on refunds, and I was finally able to enroll myself at a different school to finish my program. I started school again in late February 2020 with a fresh set of classmates and a hopeful attitude. You can imagine my frustration when barely a few weeks later I found myself locked out of training once again when the world shut down due to COVID.

Here I was again, mere months away from what was supposed to be my golden-era transition into being a professional pilot, with the finish line slipping further and further away. Well, there's another saying I kept repeating to myself that goes: "it's always darkest before the dawn". Now here we are some 20 months later, I've finished my program, the market is slowly starting to pick up again; big 705 operators have recalled many of their pilots, smaller operations are starting to look for talent again, and we're finally seeing the light at the end of the proverbial tunnel.

All this to say, even though this has been a huge setback for the industry, it has not reversed the fact that there is a worldwide pilot shortage, and this remains one of the best times for aviators like me and you. Good things come to those who wait, we have waited and we're finally ready to take off again!

Samuel Nikiema

FROM THE CAPTAIN'S CHAIR



MESSAGE FROM THE PRESIDENT

Good day Members,

I hope this message finds you well. Looking back on the six months since our last newsletter, it is hard to comprehend the changes that have taken place. Although many of us were optimistic and knew that better days were ahead for aviation, I don't think any of us expected

the speed at which the recovery is taking place. The Airline industry is moving quickly to get passengers in seats and get cargo to its destination. With the borders beginning to open, a boom in cargo, and a population of travelers eager to escape the restrictions of the pandemic, the airline industry is moving in the right direction, and moving fast. This is great news for everyone, but especially for us here at UPN where aviation flows through our veins. I am truly grateful that as a group we have collectively pulled through one of the worst times in aviation history. Things were difficult, (for some more than others) and it was not easy, but we are still here.

Now it is time for us to move forward. During the pandemic, we continued to inspire, and help those that we could, and now we want to make sure that everyone here at UPN is ready to catch the next wave. I encourage you all to use UPN to help you along your path. Network! Network! Network! This is your greatest value as a UPN member. We have grown to over 85 members and that number will continue to increase. Everyone should

have a Profile and a Bio in the Network section of the members only side of the website. Take a look and see whom our membership consists of. Find someone that is at the same stage as you and see if you can help each other progress together, rather than doing it on your own. Find someone that is where you want to be and ask them for guidance and advice on how to get there. Jump in on our popular Zoom pop-up meetings and get to know your fellow members in an agenda free discussion. The UPN leadership team is also here to help you connect with other members that can help you along your path. You are not in this alone!

UPN will also be hosting courses online in the next few months, and hopefully an in-class weekend course early next year. These courses are for your benefit and may give you the edge you need against a stack of resumes competing for the same position. So, take advantage when these opportunities arise. We have had very positive feedback on our Interview & Resume prep course and have also heard that the information received has led directly to new jobs. Our Transport Canada collaboration with Women in Aviation provided a course with important information for anyone flying an airplane. Information that could one day save your life. We look to provide you with courses that will increase your knowledge and increase your value as an aviation professional trying to progress in the industry. So again, please take advantage.

Our “Top Flyers Canada program,” continues to move forward. We completed a Zoom meeting with our collaborators (Jazz; The Dream ever Dies Foundation; SUGU Drones; and The Caribbean Flying Club) this summer and the feedback was very positive. All the parties involved are excited to work with each other and look forward to the change that we can create if we all put our efforts together. This is very good news for you as UPN member. More details will be provided to the membership as the groundwork moves forward, but I will say that I am very excited about the potential and possibilities that will be generated from the program.

In closing, I would like to encourage you all again to be ready! Many have heard me say, “Get a seat before the music stops,” and that music is about to start playing again. For those of you that were able to find positions during the pandemic, I salute you. You never stopped working and were able to progress in a very difficult time. I hope this encourages others not to give up. I look forward to hearing about more successes amongst our group as the aviation industry picks up steam. Hopefully UPN will have contributed to some of those successes.

As Always

Walk Good & Fly Safe

Warren Holt
Boeing 787 First Officer
President & Membership Director

THE DEBRIEF!

SO HOW DID WE DO?

Our goal is to keep improving and providing content that you find enriching and useful. Do you have an idea,

concept, or a specific piece that you would like to submit for our next newsletter? We would love to hear from you! Feel free to reach out to us at urbanpilotsnet@hotmail.com with ****NEWSLETTER**** in the subject line.

We look forward to hearing from you!



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