July 2025

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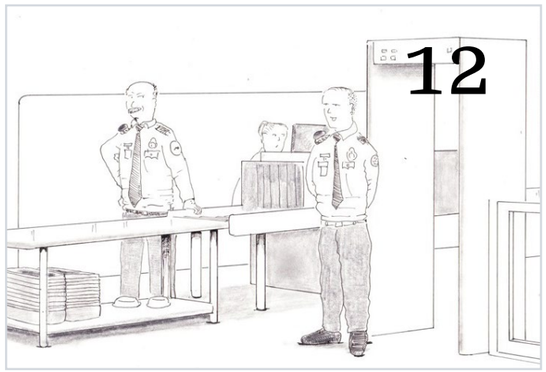


Photo: Marathon-Photos.com

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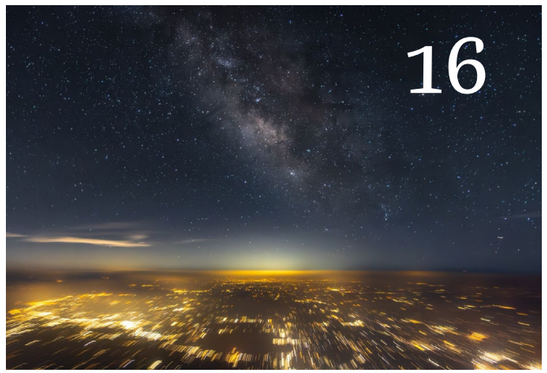




Photo by: Steve Kelly



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Empire Airlines

The Grid (contract comparisons, pay charts, company details, etc.) has moved online. Click on the airlines above to go directly to that airline's information, or go to www. AeroCrewNews.com/go/thegrid.

Dear readers,

It has come to Aero Crew News' attention that passengers have started to complain to TSA about working crew members cutting into the security line for TSA PreCheck®. As of now, we know this has affected RDU and has caused TSA to change their policy and now require crew members to wait in line. Will these same passengers complain when their flight is delayed because the working crew is late to the gate? We are anxious to learn more. If you know of any other airports doing this, please email us at info@aerocrewnews.com.

As we know, TSA is retiring the KCM (Known Crew Member) lanes and is planning to launch a new program called, CMAP (Crewmember Access Point). TSA has yet to release any firm details regarding this new screening program, but Aero Crew News has received word through AirTera that the start of CMAP is delayed and KCM will remain active until CMAP is fully operational. For more information visit AirTera.com.

Evidently, the new CMAP will provide dedicated security lines for employees only, much as it used to be. The demise of KCM, just proves that we cannot count on being accommodated. It has been reported that too many took advantage of skipping security and brought banned items into the secure areas of airports. Given the high number of random checks that KCM applicants face, I look forward to CMAP—potentially a dedicated line just for crew members.

Until then and always, fly safe!

Craig D. Pieper

Craig D. Pieper



About the Publisher

Craig Pieper is the Publisher and Founder of Aero Crew News. Craig obtained his Bachelors of Science in Aeronautical Science, along with a minor in Aviation Weather, from Embry-Riddle Aeronautical University in 2001. Craig is also a captain for a major airline with a type rating in the Boeing 737 & Embraer 145 and has logged over 10,000 hours of flying time since his introductory flight on November 14th, 1992.

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June 2025

What you may have missed in June

Feature – Professional Pilots of Tomorrow is a tremendous organization for pilots at any stage of their careers.

Baggage – Learn to adapt, bounce back, and grow from your experiences.

Business Vector – A new reference book for business aviation is about to hit the press.

Coffee & Pretzels – Begging is a thing of the past!

Fitness – Three elementary concepts to adopt to improve your health are proffered.

Grey Matter – The future of single-pilot operations is examined

Knowledge Base – Understand hypoxia to identify risks and symptoms to avoid disaster.

Money – True wealth secrets are revealed in this compelling piece.

Moonlight – He needed a place to park his plane. He built an FBO.

Perspectives – Expand your proficiency and capabilities with new experiences.



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UA Flight Attendants' Temporary Agreement Details

Aero Crew News has obtained some of the highlights from the United Airlines Flight Attendants TA. Read More



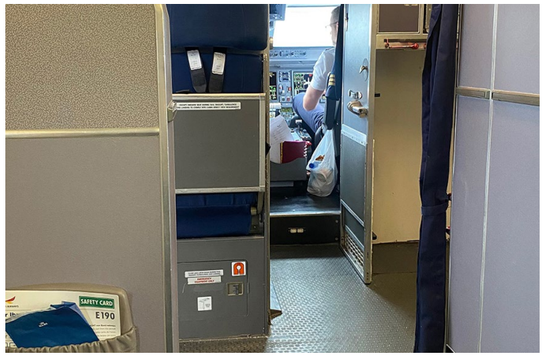
Upgauging to a dual-class future

Today marks a major milestone in the proud history of Piedmont Airlines, as the airline announces its next chapter – one defined by growth, stability and an unwavering commitment to safety and operational excellence. Beginning in early 2028, Piedmont will expand its fleet to include a new aircraft type: the Embraer 175 (E175). Read More



ALPA Pilots Champion Aviation Safety in Major Hill Push

Last week, hundreds of ALPA pilots took part in over 250 high-level meetings on Capitol Hill, engaging directly with members of Congress and their staff. These discussions focused on three critical issues impacting aviation safety and operations, ensuring that pilots' firsthand perspectives remain central to ongoing aviation safety... Read More



Allied Pilots Association Opposes Efforts to Delay Installed Physical Secondary Barriers: "Enough is Enough"

The Allied Pilots Association (APA) expressed its firm opposition to airline industry efforts to delay implementation of installed physical secondary barriers. Read More



SkyWest Places Firm Order For 60 Embraer Aircraft

Embraer has received a firm order from SkyWest, Inc. for 60 aircraft with purchase rights on 50 additional aircraft. Deliveries of the aircraft will begin in 2027. The list price value of the firm order contract for 60 aircraft, which will be included in Embraer's Q2 backlog, is US$3.6billion. Read More



Aviation NewsAviator Bulletins Frontier Airlines Launches New Nonstop Service From San Juan to Puerto Plata

Frontier Airlines further grew its operations at Luis Muñoz Marín International Airport (SJU) with the launch of new nonstop service to Gregorio Luperón... Read More



FedEx Pilots Signal Concern

Following FedEx's fiscal year 2025 earnings call, FedEx pilots, represented by the Air Line Pilots Association, Int'l (ALPA), expressed concerns over operational risk posed by an outdated pilot agreement, lack of employee engagement and strategic misalignments with growth opportunities. Read More



ALPA Calls on FAA to Reject Attempts to Delay Critical Flight Deck Security Measures

The Air Line Pilots Association, Int'l (ALPA) today urged the Federal Aviation Administration (FAA) to immediately deny Airlines for America's petition seeking a two-year delay in implementing mandatory flight deck secondary barriers. Read More



ATI Pilots Mark Five Years of Prolonged Contract Negotiations

Today marks the fifth anniversary since Air Transport International (ATI) pilots, represented by the Air Line Pilots Association, Int'l (ALPA), exchanged opening proposals in contract negotiations. Read More



Atlas Air Worldwide Introduces its Miami Operations Gateway with Relocation to State-of-the-Art Cargo Facility at Miami International Airport

Atlas Air Worldwide Holdings, Inc., the leading global provider of outsourced aviation logistics, today announced its expansion at Miami... Read More



NTSB Report on Alaska Airlines Flight 1282 Highlights Critical Role of Two Pilots

Capt. Jason Ambrosi, president of the Air Line Pilots Association, Int'l (ALPA), issued the following statement after the National Transportation Safety Board (NTSB) adopted its final investigative report into the in-flight separation of a mid-exit door plug on Alaska Airlines Flight 1282... Read More



Griffin Global Asset Management Announces the Delivery of Six Boeing 737 MAX 9 Aircraft to United Airlines

Griffin Global Asset Management is pleased to announce that it has entered into long-term lease agreements for six new Boeing 737 MAX 9 aircraft to United Airlines. The aircraft delivered over the course of... Read More



ALPA Applauds House Transportation Committee's Approval of Key Mental Health Legislation

The Air Line Pilots Association, Int'l (ALPA) commended the U.S. House of Representatives' Transportation and Infrastructure Committee today, led by Chairman Sam Graves (R-MO)... Read More



Mile High Growth in Denver: Southwest Airlines Cargo Celebrates Opening of New Facility Offering Increased Capacity

Southwest Airlines Co. celebrated the grand opening of its expanded Cargo facility at the Denver International Airport... Read More



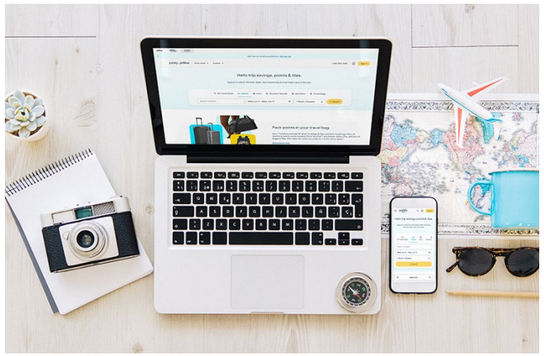
Spirit Airlines Lands in the Heart of South Carolina with Launch of Inaugural Service at Columbia Metropolitan Airport

Spirit Airlines is soaring to its third destination in South Carolina with today's launch of affordable, nonstop flights from Columbia Metropolitan Airport (CAE). Read More



The Cherry on Top: JetBlue Launches Service to Cherry Capital Airport in Traverse City, Michigan

JetBlue today announced the start of its summer-seasonal service between Boston Logan International Airport (BOS) and Cherry Capital Airport (TVC) in Traverse City, Mich. Taking off today and operating Thursdays... Read More



JetBlue Travel Products Relaunches as Paisly, LLC, a Human-First Travel Services Company

JetBlue today announced the official launch of Paisly, LLC, formerly JetBlue Travel Products. The renaming marks a strategic milestone in JetBlue's broader JetForward strategy, as Paisly evolves from an internal travel platform into a full-service... Read More

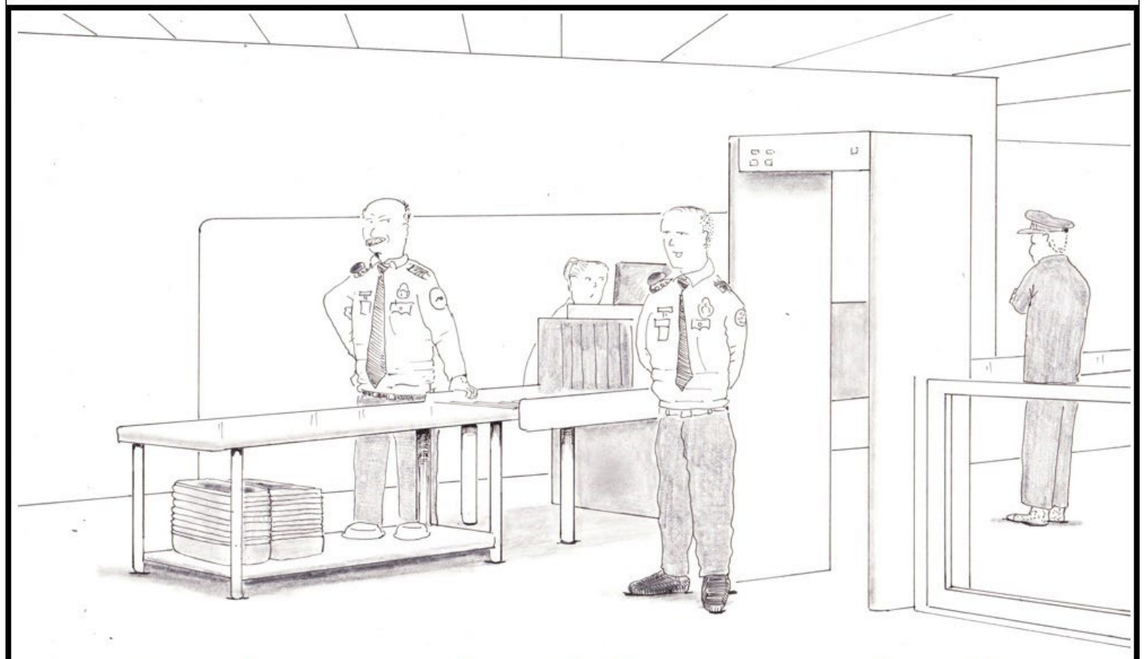


Ciao Italia! Alaska Airlines announces new nonstop service between Seattle and Rome

Alaska Airlines is continuing the celebration of our new global gateway in Seattle by adding Rome, Italy, to our international destination lineup. This is the first time in history that the "Emerald City" will be connected to the "Eternal City"... Read More

coffee & pretzels

Greg Kaley



Watching passively as flight crews cut through lines of impatient passengers never gets old.



[Check Out Last Month's Cartoon]



About the Author

Greg Kaley is a pilot with a major airline who also happens to be a cartoonist. He started the cartoon "Coffee & Pretzels" in 2016. After graduating from Embry-Riddle Aeronautical University (Prescott Campus), he flight-instructed and subsequently... Read More...

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PERSPECTIVES

What I Have Learned by Mentoring Young Pilots

Mentoring is a mutually beneficial two-way street

Written by: John McDermott

As any industry professional knows, the aviation world is a cyclical one: demand comes and goes, pilots change companies, senior airmen retire or leave the industry. Equally, there is a steady stream of new, enthusiastic student pilots constantly entering the industry with hopes to share a piece of the skies. Some want a leisurely trip through the air on a sunny day; some fly for personal business; and many choose to try their hand at making a career in aviation.

I have had the privilege of spending five years in the aviation industry, both as a student and as a professional. I take the occasional personal trip to a fun airport or to see friends, and I have had plenty of opportunity to share my love of flying with others.

Often, I hear from friends and colleagues asking me to meet with a budding new student pilot about flight training—to answer questions about training, to help find a flight school, or to help with mapping out a career in aviation. Though I may only meet with many of these mentees once or twice, I have also had the honor of establishing long-term relationships with some and staying in semi-regular contact.

I know it's cheesy to say, but there really are times that I have a lot to learn from mentoring young pilots. Each occasion to meet with someone new, no matter their experience level, is an opportunity to see the aviation industry through a new pair of eyes: a new line of questioning, a new situation, a new interaction that can challenge how I see and consider the state of the industry and how I give advice.

The same can be said about teaching—how flight instructors learn a lot about flying by teaching. My thought follows the same vein. By interacting with a new individual with a unique situation and a unique reaction to the advice I give, I get to reconsider how and why I give the advice I do. Applying familiar advice to a new situation has an equally remarkable impact, as it challenges me to apply new conditions and see the same topics in a new light; all things that help me grow.

One particular piece of advice that I often give is the importance of networking and making connections. Indeed, these connections have given me many opportunities that I might not have otherwise had. Yet, I'm not always a perfect connection-maker. I've fumbled the bag before, and I have often let work obligations overshadow the invaluable practice of not only meeting people but growing my connections with them.

Recently, offering this advice has given me the opportunity to consider how I can build new connections for myself. Purely by giving others advice, I have reminded and motivated myself to get the wheels turning on new situations, meetings, and environments to help me grow my career beyond just amassing flight time.

Ultimately, being a mentor to younger, greener pilots is a unique challenge I find too few experienced pilots take on. There is a wealth of experience and knowledge in our industry waiting to be revealed, and I hope more pilots take the call to encourage young students. I have benefited greatly being on both sides of the equation, so to speak, which continues to help me to this day.

The responsibility of flying puts many demands on pilots: the demands to stay proficient, be professional, and handle our duties with respect and focus. Yet there are many calls hiding just behind the wing that can be more difficult to notice or more challenging to heed. Beyond simply flying, and doing it well, I believe pilots are equally called to create and uphold, to the best of their abilities, a culture that welcomes and inspires curiosity, connection, and mutual growth. Getting to know others and influencing them to be safe and proficient airmen, is a unique blessing often overlooked. I am first to admit that I have not always heeded that call as well as I could have, but I continue to strive to be welcoming of and encouraging to those looking for guidance.

Though it is a great honor, flying is a great responsibility—one that I am fortunate enough to bear every time I step into the airport. And I look forward to continuing to have the opportunity to guide new airmen into the ranks of pilots and to help them enjoy long, safe, happy careers.



About the Author

John McDermott's passion for aviation began in a Michigan bookstore when he found a story about a chance encounter between enemy pilots during World War II. Soon, after watching countless hours of fighter jets and traffic from his home near O'Hare International Airport, he was hooked forever.. Read More...



What's Your Sign? Are You Sure?

Learn when to find your birth constellation in the night sky, and other interesting observations from the flight deck.

Written By: Howard Parkin. MBE BSc, BEd, FRAS

Editor's Note

The renowned English astronomer, Howard Parkin, writes for us from the Isle of Man, a British Crown dependency. Aero Crew News will not change his spellings nor punctuation to American English.

Living as most of us do, primarily in one location on Earth, we tend to be aware of the seasonal nature of the night sky. Whilst this is valid, the labelling of "the seasonal nature of the sky" gives a distorted and inaccurate view of the night sky, especially if as aircrew, your work takes you from the northern to southern hemispheres on frequent occasions. We speak of the seasons most often about the effect of the seasonal changes brought about by the weather. We erroneously talk about "stars of winter, spring, summer, and fall" which is only valid if you are viewing the night sky from one specific location.

The more correct and precise titles would be to refer to "the stars of December, or June" etc. As the Earth orbits the Sun on its annual journey, we only see certain stars, in the evening hours as we look in the exactly opposite direction to the Sun. At any time of year, we will always see the same stars. For instance, we see the constellations of Orion, Taurus and Gemini in December through February, regardless of your location on the Earth. In the U.S. and the northern hemisphere, we see these dramatic and bright stars in the winter but in the southern hemisphere, it is their summer.

The ancient observers saw the paths of the planets as influencing our human existence on Earth which gave rise to the subject and study of astrology, strongly linking astrology to astronomy. However, in the sixteenth and seventeenth centuries, Copernicus, Kepler, Galileo, Newton, and others proved that the Earth goes around the Sun, contrasting the previously accepted theory that the Sun, Moon and other planets orbited the Earth. Consequently, the two subjects maintained their common link but went their separate ways.

The Earth's axis is inclined at an angle of 23.5 degrees from the equator, and this tilt (or inclination) gives us the seasons. The path that the Sun, Moon, and planets appear to travel along throughout the year is an imaginary line in the sky called the ecliptic. The name derives from the world eclipsis and is the path along which eclipses can occur. The zodiacal constellations are the twelve constellations that sit on the ecliptic.

Consequently, one of the twelve zodiacal constellations on the ecliptic that the Sun passes through when you were born is your own individual birth sign. Consequently, your birth sign will not be visible at night when you celebrate your birthday. You only see your zodiacal sign about six months before (or after) your birthday.

However, due to the phenomenon known as the precession of the equinoxes, the dates that the Sun passes through your own birth sign are about a month out. For example, if you were born on 3 August, you have likely always thought your sign is Leo. But the Sun is still passing through the preceding neighbouring constellation of Cancer on that date. Furthermore, and to further confuse, there is a thirteenth sign of the zodiac, Ophiuchus (the Serpent Bearer, pronounced oh-fee-YOO-kus), which astrologers conveniently ignore. Strictly speaking, if you were born between 30 November and 18 December, your sign is Ophiuchus, not Scorpio. Use that in the pub!

The zodiacal constellations through which the Sun passes annually

On July 1 the ecliptic stretches across the sky from horizon to horizon, or more specifically, it meets the horizon at an angle of 305 degrees at sunset, and 63 degrees at sunrise. This is because the sun at its most northerly position at the time of the June solstice.

As you observe the night sky from the flight deck in July through September just

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before sunrise, it is possible to see the faint autumnal stars of Pegasus, Andromeda and Pisces, followed by the bright stars of Taurus and Orion. In the opposite direction just after sunset, you may see the setting spring constellations of Virgo and Libra. The constellations of Gemini, Cancer, and Leo will not be visible as the Sun passes through them in the July to September period and will thus be too near the sun for observation.

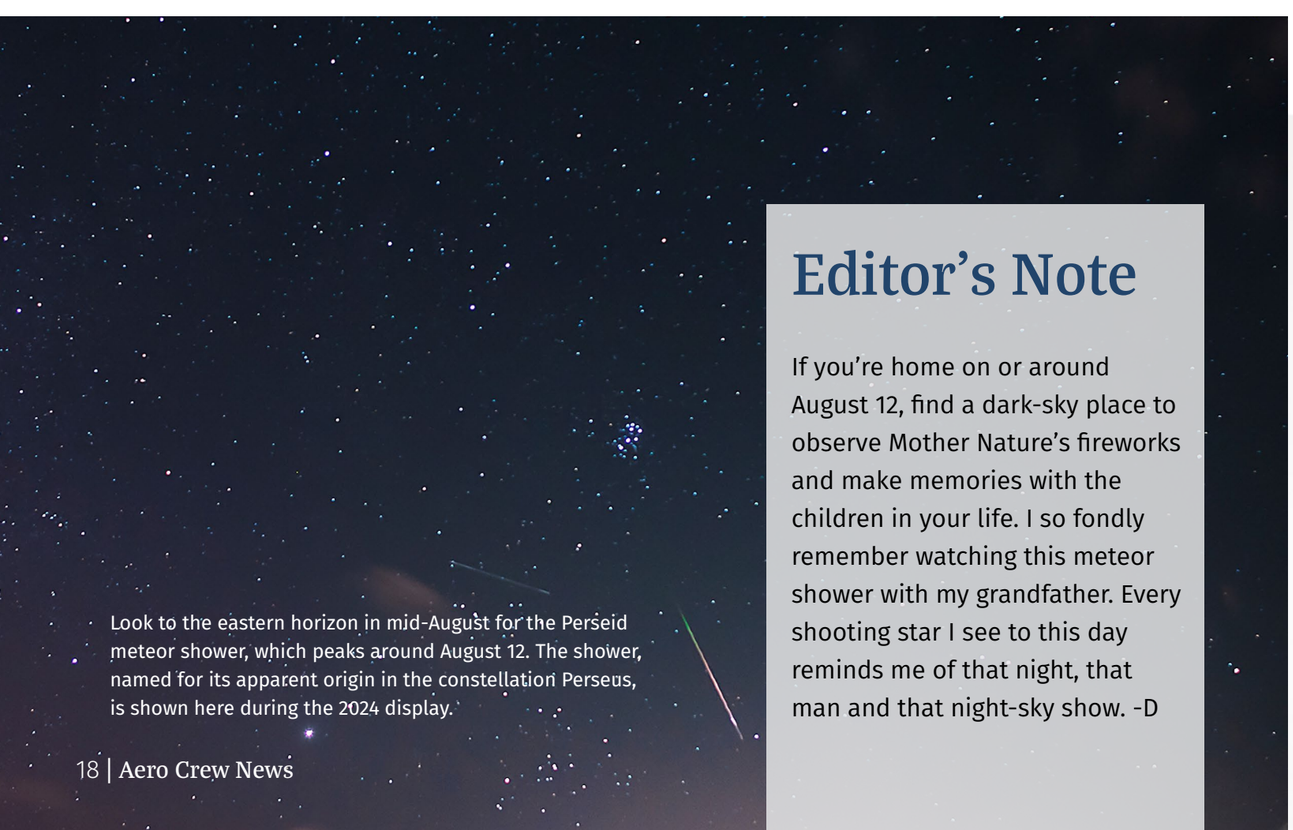
As well as the view of these constellations (after all the excitement of the “planetary parade” earlier this year), during July to September the Earth has moved on its orbit around the Sun, so Venus has now moved into the morning sky and is very bright and unmistakable in the dawn sky passing through the constellations of Taurus, Gemini and Cancer.

Finally keep your eyes peeled on the eastern horizon in mid-August as one of the best meteor showers of the year occurs on and around August 12. The Perseid shower is so named because it appears to come from the constellation of Perseus. Around this date, look for bright rapid shooting stars or meteors around the northeastern horizon.



About the Author

Inspired by the space race in the 1960s, **Howard Parkin** has been an enthusiastic astronomer since childhood and has become an accomplished and entertaining speaker on the subject throughout the... Read More...



Look to the eastern horizon in mid-August for the Perseid meteor shower, which peaks around August 12. The shower, named for its apparent origin in the constellation Perseus, is shown here during the 2024 display.

Editor’s Note

If you’re home on or around August 12, find a dark-sky place to observe Mother Nature’s fireworks and make memories with the children in your life. I so fondly remember watching this meteor shower with my grandfather. Every shooting star I see to this day reminds me of that night, that man and that night-sky show. -D

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Supersonic Flight – The Need for Speed

Written by: Richard Swindell

In the wake of our single-pilot operations discussion in June, this month we're taking a quick look at another operational future: supersonic flight. Or, as Doc Brown would say, "*Back, to the future*!"

That was of course a nod to the Michael J. Fox movie from 1985, but actually speaks to the airline industry's initial design success (though a commercial failure) of supersonic flight with the joint British Aircraft Corporation's (later BAE) and France's Sud Aviation (later Airbus) 1976 rollout of the Concorde. At the same time, the Russians (formerly known as the Soviets) were trying out the supersonic thing as well and actually introduced the Tupolev Tu-144 two months prior to the Concorde's unveiling. Even though it hit the skies at Mach 2, the Tu-144 had significant reliability issues and was quickly removed from passenger service. In the U.S., Boeing also dabbled with a supersonic airliner (B2707), but abandoned that to build the 737 instead—which is too bad.

Anyway (and without making this a history of the Concorde), the short story is that SST (supersonic transport) has always had a fundamental inconvenience—the associated "boom." A build-up of pressure waves compressed until they merge into a single shock wave at around 741 mph (at sea level), leading eventually to the release of the compacted sound waves in the form of a thunderclap. Because of the associated noise, which is generated as long as the aircraft remains in supersonic flight, an uncomfortable carpeting effect of noise pollution and potential damage to some structures (i.e., windows), continuously occurs along the aircraft's flightpath. For the Concorde, this resultant disturbance meant that it could fly supersonic during open ocean portions of its trips, and everything else was at regular old jetliner speeds around 400 or 500 mph. The consequence was chronic inefficiency and no good reason for operators to order the relatively small, expensive jet—nor for passengers to pay the 2025 equivalent of $20k per flight. So, instead of building the 300 that were planned during the proof-of-concept period in the 1960s, only 20 were ever constructed. This has of course left a bad taste in manufacturers' mouths for decades now. But as mentioned in last month's article, where this industry has only ever removed pilot stations from the flight deck, this industry has also never gone slower—only faster over time. We are arriving at the dawn of a new SST era.

Pop quiz: If an aircraft is flying faster than the speed of sound, how are the pilots of that supersonic aircraft able to communicate with air traffic control and other aircraft?

Answer: Radio waves are a form of electromagnetic radiation, which means they travel at the speed of light, or about 671,000,000 mph – which is a tad faster than the speed of sound.

So where do these fun facts and historical aviation footnotes leave us?

Leaning on military stealth technology as well as NASA research and modeling including the X-59, companies such as Boom Supersonic, Spike Aerospace, Exosonic, and Virgin Supersonic are all in the race to develop and deliver quieter, more efficient SST airliners. With lighter, yet stronger composite materials coupled with improved aerodynamic design, the ability to delay the onset of compressibility and relieve it more effectively means a significantly lower sound signature making flight in the supersonic range not only palatable, but highly desirable for those interested in getting to their destinations more quickly—and who isn't? In fact, Boom recently had their own proof of concept when they (literally) quietly broke the sound barrier in January, doing so in the same airspace previously occupied by Chuck Yeager in 1947.

Further, Boom is planning to have their Overture jet enter service by 2029, and at its current design speed of Mach 1.7, means

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getting to destinations twice as fast as current transport category aircraft. Even airlines are starting to bet on this technology coming to fruition with United and American having placed orders for 15 and 20 Overture jets along with 35 and 40 options, respectively. Japan Airlines also ordered 20, and a mystery European operator submitted an option for 15 of the Boom jets.

Assuming at some point in the likely near future, SST will be re-introduced to the industry, there will be a host of required supporting actions and measures to go along with it. New regulations and procedures will need to be created by regulators, operational arrangements instituted and approved between ICAO states, ATC systems and procedures evaluated and amended in order to facilitate supersonic flight, ground operations and infrastructure readied (especially if mid-Pacific flights will require a fueling stop before reaching the planned destination), and pilots trained to manage the unique aspects of flying faster than the speed of sound.

"Roads? Where we're going, we don't need roads..."

Before we close for the month though, here's a thought brought to mind by last month's single-pilot ops article: Boom's Overture jet is currently designed for two pilots, which is good. However, its speed is such that instead of needing to augment a flight with one additional pilot as is currently required, for example, on a 7+ hour flight from Newark to London, it could be completed in about 3.5-hours with just two pilots. San Francisco to Tokyo with a double augmented crew now, would be 6-hours instead of 12 hours and could again, be flown with only two pilots. Some of these flights could become "turns" in airline parlance, where a two-pilot crew flies to the destination and back in a single day—or simply lays over and returns the next day. Even in domestic airspace this potentially means more legs flown per day by a single pair of pilots, resulting in fewer required pilots overall in order to complete the same amount of scheduled flying, increasing airline operational as well as financial efficiency. This is just something to think about.



About the Author

Richard Swindell left active-duty military service and transitioned to the airline industry where he flies and works as a line check airman for a major airline. Read More...

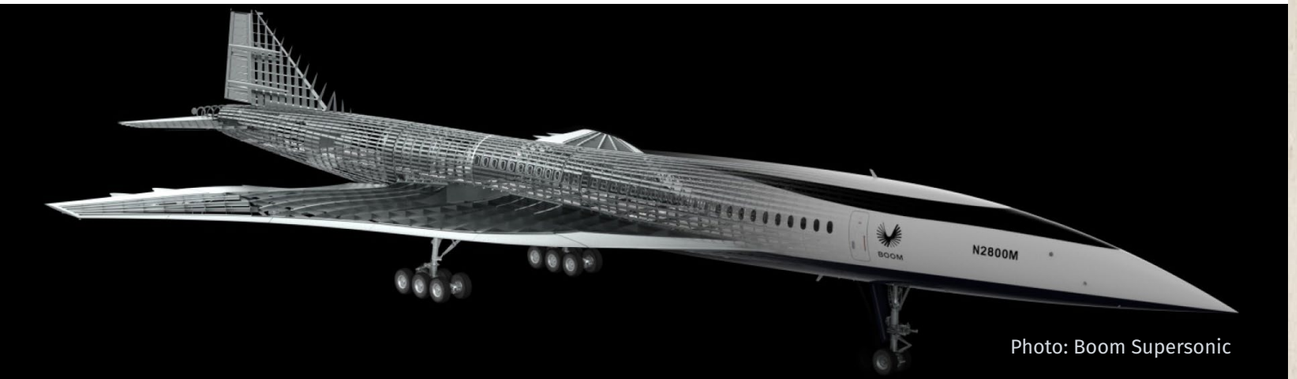
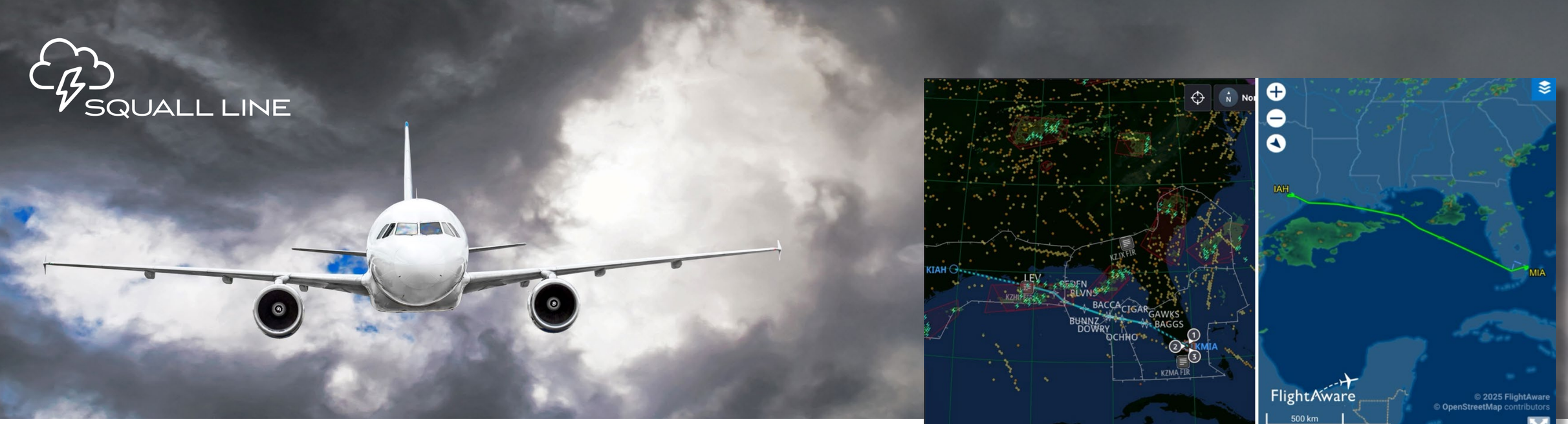


Photo: Boom Supersonic





Planned route (left panel) displayed on FlightDeck Pro® overlayed with SkyPath® turbulence, weather radar and lightning, and actual route (right panel) flown by United Airlines Flight 1964 from Miami (KMIA), Fla. to Houston (KIAH), Texas on 8 May 2025.

Game-Changing Turbulences Avoidance using SkyPath®

Written By: Ajay Raghavendra, PhD

Flight segment by flight segment, airline pilots are committed to the safety of every flight. Each segment is ripe with a minefield of threats. These threats primarily occur in four flavors and are encapsulated in the FAA's PAVE acronym i.e., **p**ilot (personal), **a**ircraft (technical), en**v**ironmental (e.g., weather) and **e**xternal pressures. Pilots exercising sound judgement, crew resource management (CRM), and threat and error management (TEM), greatly mitigate the risks associated with flight operations.

While the safe transport of passengers and cargo is paramount in the air-transportation industry, the overall comfort of passengers is an important consideration for passenger airline pilots. From passenger comfort standpoint, weather is, without doubt, a significant factor. For instance, flight attendants often request passengers to close the window shades prior to disembarking the aircraft to prevent the cabin from overheating on a hot summer day. Pilots avoid thunderstorms, request PIREPs from ATC, alter flight routes, altitudes, and speeds to improve the safety margins and promote passenger comfort.

Turbulence forecasting and avoidance has plagued the air-transportation industry for decades. As recently as 21 May 2024, Singapore Airlines Flight 321 from London Heathrow (EGLL) to Singapore (WSSS) encountered severe turbulence while cruising at 37,000 ft. and unfortunately resulted in a fatality and over 100 injuries (including over 30 serious injuries that required hospitalization). The inventor of SkyPath®, Oran Hampel articulated the challenges of turbulence detection and forecasting:

"*The major difference between turbulence and other in-flight safety issues is its unpredictability. Generally speaking, commercial aviation is a conservative industry. For every threat, the industry will come up with a sensor or system to deal with the issue. For convective activity (mainly CB), we have onboard weather radar. For terrain avoidance, we have EGPWS. For conflicting traffic, we rely on TCAS, and so on. Turbulence is different. Apart from turbulence associated with convective activity, there is no sensor that can detect turbulence and enable the crew to avoid the hazard. Furthermore, weather charts, SIGMETs, and forecasts generally lack the ne*cessary accuracy to serve as a tactical tool".

In meteorology, weather phenomena are classified based on their scales of motion, and the quality of the weather forecast is influenced by the spatial resolution of a

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weather-forecast model. For instance, a global weather-forecast model with approximately a 10km grid resolution will struggle to accurately resolve a thunderstorm. High-resolution weather models at a 4km grid can resolve a thunderstorm but is computationally expensive to deploy on a global scale. Accurate turbulence forecasting requires much higher model grid resolution. Therefore, turbulent scales of motion are difficult to capture in numerical weather-forecast models. SkyPath created a product to bridge the gap in accurate turbulence forecasting by incorporating a crowdsource-based platform. SkyPath ingests data from accelerometers in iPads being used as electronic flight bags (EFBs) by pilots, Pilot Reports (PIREPs), ADS-B data, and atmospheric turbulence measurements using eddy dissipation rate (EDR) data.

SkyPath's turbulence algorithm is calibrated for aircraft size. Therefore, the severity of the turbulence a pilot receives on their EFB aps such as FlightDeck Pro® or ForeFlight® may be directly used as a tactical tool like weather radar or satellite imagery to avoid areas of turbulence. As Oran Hampel suggests, pilots can now request deviations around turbulent air pockets in a manner identical to thunderstorm avoidance. Pilots should however be cautious about navigating in areas without SkyPath turbulence reports. One of the limitations of crowdsourcing are areas and altitudes without significant air traffic. For instance, SkyPath works very well over the North Atlantic track (NAT), East/West Coast of the U.S. and West Atlantic (WAT) tracks, and terminal areas of major airports. Areas devoid of data may be treated as a "radar blind alley" and pilots should incorporate other sources of turbulence information, such as satellite data and SIGMETS, to safely traverse the sometimes unfriendly skies.



About the Author

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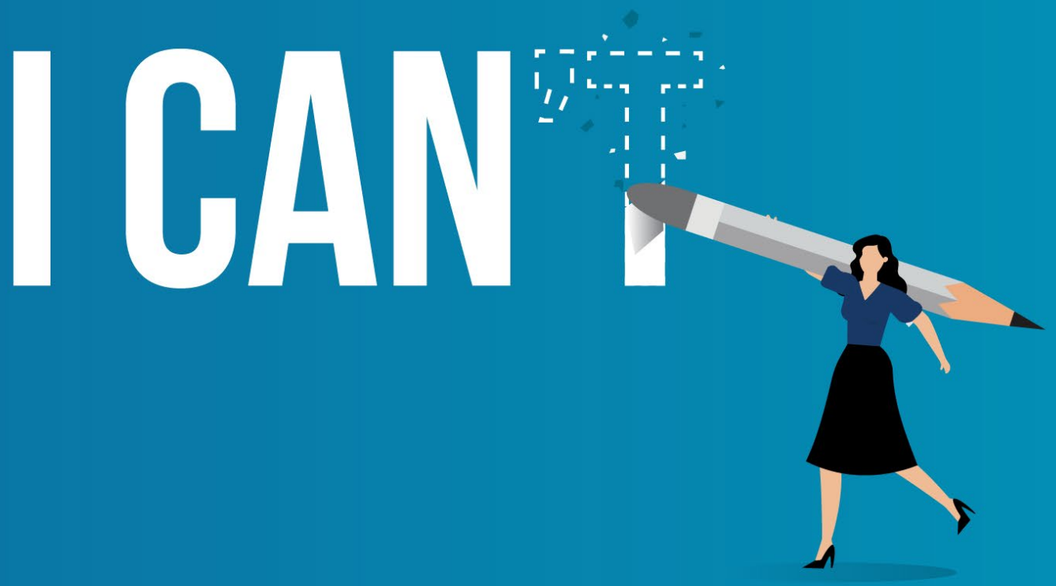
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BAGGAGE

The Benefits of Optimism (Not Toxic Positivity) and How to Build It

Written By: Reini Thijssen



Some people naturally trust themselves and expect a positive outcome, while others are more inclined to anticipate the worst. Are you someone who tends to see the glass as half empty? If so, there is good news: optimism is a skill that can be developed. Optimism is a mindset marked by a hopeful outlook on life. It means viewing challenges through a positive lens and expecting a brighter future. While some are naturally optimistic, others can learn to adopt this perspective. This article explores what optimism means, how it differs from toxic positivity, and how you can work towards a more optimistic mindset.

Most people naturally lean more toward optimism than pessimism, and this positive outlook can significantly impact our health and how we handle challenges. Optimism helps people bounce back from setbacks, stay hopeful during tough times, and feel more in control of their lives. It is not just about feeling good; it is also about how we explain what happens to ourselves. Optimistic people tend to focus on opportunities, believe things can improve, and cope better with stress.

This idea is supported by a well-known psychological study from the 1960s conducted by psychologists Martin Seligman and Steven Maier. In the study, dogs were repeatedly placed in situations they could not control. Over time, the dogs stopped trying to escape, even when a way out was available. This behavior became known as learned helplessness and showed when people or animals feel like they have no control, they may give up trying altogether. Later, Seligman found that with support and small successes, the dogs could relearn how to take action—an idea known as learned optimism. This research helped shape therapy modalities like cognitive behavioral therapy, which teaches people to move from a sense of helplessness to a more hopeful, empowered mindset. Optimism does not mean ignoring problems; optimism means believing that things can improve and that you can take steps to make that happen.

Toxic Positivity vs. Optimism

It is important to understand the differences between optimism and toxic positivity. **Optimism** is about maintaining a hopeful outlook and believing things can improve, even in the face of challenges. It does not ignore problems; it means you face them with a mindset that looks for solutions and helps you keep moving forward. **Toxic positivity**, on the other hand, is when people act like everything has to be good all the time. Toxic positivity is a "just stay positive" attitude that can worsen things, especially when it dismisses real struggles and feelings. If someone is struggling and is told to "look on the bright side," it can make them feel isolated, unseen, or like their emotions do not matter. It often leads to people hiding their true feelings and pretending everything is fine, even when they are not okay, leading to more stress and avoiding seeking help. Optimism allows space for hope and healthy emotional processing, whereas toxic positivity can lead to emotional burnout and a lack of authentic connection.

Optimism, Pessimism, and Realism

While optimism has incredible benefits, it is not always the best approach in every situation. Unrealistic optimism, often called optimism bias, occurs when someone expects the best outcomes and underestimates

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potential setbacks. While this mindset can increase motivation, it often leads to disappointment when reality fails to meet expectations. Oftentimes, a healthy dose of realism is helpful to stay grounded and avoid potential pitfalls.

Psychologists have found that the best approach to achieving goals and staying resilient involves a blend of optimism and realism, called **strategic optimism**. By acknowledging both the potential for success and the risks, you can stay motivated while preparing for obstacles. In short, strategic optimism combines hopeful thinking with a solid backup plan, a balanced approach that leads to success.

The Benefits of Optimism

Research has consistently shown that optimism offers a wide range of benefits. More optimistic people are more likely to:

- **Bounce back from adversity**: Optimistic people tend to recover more quickly from setbacks, using failures as learning experiences rather than as reasons to give up.

- **Find meaning during difficult times**: Optimists are more likely to find meaning during tough periods, which helps them maintain hope and resilience.

- **Strengthen relationships:** Optimism supports stronger, more connected relationships by encouraging open communication and emotional support, even during conflict. When balanced with realistic expectations, it helps couples face challenges together without avoiding important issues.

- **Handle pain better**: Studies suggest that more optimistic people experience less pain and recover more quickly from illnesses or surgeries.

- **Have stronger immune and heart function**: Optimism is linked to better cardiovascular health and a stronger immune system.

- **Stay more physically active**: Optimists are more likely to exercise regularly and engage in healthy behaviors.

These benefits are particularly significant when dealing with serious health conditions. Optimists are more likely to adopt healthy behaviors and maintain their motivation to fight illness, which can result in better long-term outcomes.

Train Your Brain for Optimism

Optimism is a mindset that can be developed over time. People can learn to adopt a more optimistic outlook through various strategies. One effective strategy is the Best Possible Self Intervention, which involves visualizing the best possible version of yourself and setting concrete steps to achieve it. This exercise can immediately boost your mood and outlook, with positive effects lasting up to a week. You can repeat it regularly, focusing on different areas of your life, and consider making it a weekly habit, for example, to start your week with motivation.

Step 1. Visualize Your Best Possible Future Self

- Find a quiet, undisturbed place.
- Choose a future time frame (e.g., six months from now or ten years ahead).
- Imagine your life at that time when things have gone well:
    - You started your dream business, and it is thriving.
    - You secured a major client or your ideal job.
    - Your relationships are strong and supportive.
    - You live in a home you love.
- Focus on a future that is realistic and achievable. (Avoid unrealistic fantasies such as winning the Olympics unless you are a professional athlete.)
- Spend a few moments exploring this future mentally:
    - How do you feel?
    - Where are you?
    - Who is with you?

Step 2. Write About Your Future Self (10 minutes)

Spend 10 minutes writing a description of your best possible future self.
Include as much or as little detail as you like. Answer questions about your life, achievements, and feelings.
Write freely without worrying about grammar or spelling.
Remember, this is for you only—no one else needs to see it unless you want them to.

Additional Exercises:

- **Keep a journal:** Regular journaling can boost your mood and help you reflect on your progress.
    - What positive changes have I noticed recently? What challenges did I overcome? How am I feeling today compared to before?)

- **Set achievable goals:** Ensure your goals are within control, like completing a course or building a new skill.
    - Is this goal realistic for me right now? What specific actions can I take to reach it? How will I measure my progress?

- **Discuss your goals with others:** Sharing them with trusted friends or family can increase motivation and accountability.
    - Who can support me in my goals? How can I communicate my needs clearly? What feedback would be helpful to hear?

- **Reflect on setbacks:** Instead of viewing failures as negative, consider what you learned and how it shaped you.
    - What did this setback teach me? How did it change my approach? What strengths did I discover in myself through this experience?

Final Thoughts

If you feel overwhelmed by change or fear when facing challenges, your mindset could benefit from a shift. The good news is that optimism is a skill you can intentionally develop. It is not about ignoring difficulties or pretending everything is fine; it is about choosing to believe that things can improve and that you have the ability to adapt and move forward.

By practicing habits like reframing setbacks, embracing discomfort, and reflecting on how you have grown through past challenges, you strengthen your capacity to face adversity more confidently. Optimism paired with a realistic outlook helps you stay motivated, recover from setbacks more quickly, and pursue your goals, even in uncertain times.

If you need support developing this mindset or managing anxiety and stress, contact Emerald Mental Health at www.emeraldmentalhealth.com or email reini@emeraldmentalhealth.com.



About the Author

Reini Thijssen is a licensed mental health counselor (LMHC, LPC) and a certified life coach specializing in supporting pilots and individuals in high-demand professions both within and outside of aviation. She has been a writer for Aero Crew News since 2019 and covers various aviation-related topics... Read More...

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FAA Alcohol Regulations and Policy

Written by: Matthew Bulow

The Federal Aviation Regulations (FARs), specifically Part 67, outline the medical standards for airmen holding FAA medical certificates and highlight the conditions that may disqualify airmen from holding such a certificate. Under Title 14 Code of Federal Regulations (CFR) § 67.107, 207, and 307, which outline the mental standards for certification, "substance dependence" and "substance abuse" are specifically disqualifying conditions.

These conditions are not the same as clinical diagnoses. In fact, the regulatory definitions of substance dependence and abuse differ drastically from the clinical definitions of alcohol or substance use disorders. Unfortunately, the FAA has failed to substantively update these mental health regulations for decades to keep up with the more rapidly evolving clinical world. Accordingly, pilots and air traffic controllers (ATCs) should understand the unique and archaic regulatory landscape of alcohol and substance use that governs the issuance of FAA medical certificates.

Substance Dependence and Abuse

Substance Dependence

Substance dependence is defined by the Federal Aviation Regulations (FARs) as "a condition in which a person is dependent on a substance other than tobacco or ordinary xanthine containing (e.g., caffeine) beverages." To be "diagnosed" with regulatory substance dependence, an airman only needs to meet ***ONE*** of four broad factors. Those factors are: (1) increased tolerance, (2) manifestation of withdrawal symptoms, (3) impaired control of use, and (4) continued use despite damage

to physical health or impairment of social, personal, or occupational functioning.

The most black-and-white of the four substance abuse factors in practice, and, frankly, the only factor that has been outlined in any detail beyond the regulatory language by the FAA, is "increased tolerance." The FAA generally considers an airman's blood alcohol content (BAC) at the time of an "alcohol event" to determine whether they have an increased tolerance to alcohol. Most often, an alcohol event involves an arrest under suspicion of driving under the influence (DUI) or driving while intoxicated (DWI) but is not necessarily limited to DUI/DWI arrests. An airman with a BAC equal to or greater than 0.15% who shows "minimal behavioral evidence of intoxication" is considered to have increased tolerance. An airman with a BAC equal to or greater than 0.20% who is "conscious and responsive" is also considered to have increased tolerance.

Finally, the FAA considers substance dependence a lifelong condition. So, if an airman is found to meet any of the four factors at any time in their life, they will not be able to escape the substance dependence label. That is not to say the airman is entirely disqualified from holding an FAA medical certificate for the rest of their life. Airmen with a history of substance dependence may hold an FAA medical certificate if they can show "established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance(s) for not less than the preceding 2 years."

Significantly, airmen may be granted an Authorization for Special Issuance (SI) of a medical certificate at the discretion of the Federal Air Surgeon. Generally, for airmen with a history of substance dependence, special issuance requires compliance with the Human Intervention Motivational Study (HIMS) Program. The HIMS Program typically begins with an addiction evaluation, followed by residential treatment, continued abstinence testing, intensive outpatient or individual treatment, engagement in a peer support group (AA, SMART Recovery, Birds of a Feather), HIMS neuropsychological and psychiatric evaluation, HIMS AME examination and report, then lengthy review by the FAA. After all that is completed properly, the airman may be granted an SI, which will require monitoring terms such as continued aftercare, peer support group attendance, and abstinence monitoring in order to maintain the SI.

Substance Abuse

Substance abuse is defined in three different ways by the FAA and an airman can be denied medical certification if they meet any of the following criteria:

(1) Use of a substance in a situation in which that use was physically hazardous, if there has been at any other time an instance of the use of a substance also in a situation in which that use was physically hazardous;

(2) A verified positive drug test result, an alcohol test result of 0.04 or greater alcohol concentration, or a refusal to submit to a drug or alcohol test required by the U.S. Department of Transportation or an agency of the U.S. Department of Transportation; or

(3) Misuse of a substance that the Federal Air Surgeon, based on case history and appropriate, qualified medical judgment relating to the substance involved, finds—

  (i) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

  (ii) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Considering most readers are not attorneys and may not appreciate the legalese of that regulation, it is worth restating those definitions:

(1) Use of a substance in a situation where that use was physically hazardous (read: while driving or operating machinery);

(2) A positive DOT drug or alcohol test; or

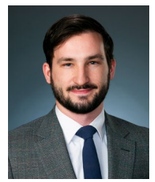
(3) "Misuse" that the Federal Air Surgeon thinks would prevent the airman from safely performing flight duties.

Unlike substance dependence, substance abuse is not considered a lifelong condition. The regulation clearly states that substance abuse is only disqualifying if it occurred in the two years preceding the application for airman medical certification.

Similarly to substance dependence, the Federal Air Surgeon may grant an SI to airmen with a history of substance abuse, even if the substance abuse occurred within two years of application. The requirements to obtain an SI with a history of substance abuse are much less rigid and often are limited to simple abstinence monitoring for an extended period of time.

Be Proactive

If you are applying for a medical certificate or reporting an alcohol event to the FAA under 14 CFR § 61.15, it is crucial that you address any potential concerns regarding your history of substance use up front. You have one shot to get that report right. Once an airman is found to meet the criteria for substance abuse or dependence, that bell cannot be unrung, except in extremely rare circumstances. An aviation attorney may be able to help you present your case in the best possible light and ensure you do not face expensive and overly burdensome monitoring terms unless it is appropriate under the circumstances.



About the Author

Matthew Bulow, Esq. is an aviation attorney at Ramos Law in Denver, Colorado. Matthew currently practices FAA medical-certificate defense exclusively in... Read More...

BUSINESS VECTOR

Putting on the Nostradamus Hat – Some 2025 Survey Data Predictions



Written By: Christopher M. Broyhill, PhD, CAM, CCP

Well, it's that time of year, folks. The survey data waiting period. The big three surveys, NBAA, Gallagher, and IBM, have all completed their data collection and analysis, and the administrators of those surveys are waiting for the expiration of the three-month safe-harbor period (required by federal law) before they release the data. Since the data is usually current as of March/April of the year, the data drops in late July to early August.

The suspense is building. I am asked about my thoughts on current compensation trends on a regular basis so before I get into some numerical predictions, let me discuss two of the trends I've encountered throughout the last year.

I've noticed several LinkedIn posts that have tried to convince the industry that the pilot market is softening. In fact, Sun Country CEO Jude Bricker declared the pilot shortage "over" just last month (Aero Crew News, 2025). I'm not seeing that in the compensation world. So far this year, I've performed thirteen compensation studies for a variety of operators including corporate flight departments, management companies, and family offices. In every case, the compensation levels the client was paying were low versus the data and the client knew they would have to increase compensation or risk losing personnel. Additionally, I've processed hundreds of concierge level reports where the client asks me to run their compensation versus the data, and nearly all of those have been low as well. Additionally, there isn't a day that goes by that I don't see at least five corporate-pilot positions advertised either on social media or via email. That doesn't sound like a soft market to me. Where the airlines are concerned, follow the news. They are all taking delivery of new aircraft and adding route structure, and all of them will suffer more crew retirements as Boomers (like yours truly), are retired. Whether we're talking business aviation or the airlines, the demand is still there.

Turning to maintenance personnel, compensation for the four positions I track grew almost 10% from 2023 to 2024, just under the pilots at 11%. Maintenance supervisor, a crew-chief/managerial position, showed compensation growth of nearly 17% over the same period. From an anecdotal perspective, I've had a booth at the NBAA Maintenance Conference for the last two years and I've offered any maintenance professional who came by the booth a free review of their compensation levels. In 2024, the majority of them were low versus the data. In 2025, the majority were at or above the data. Increased price means increased demand, folks.

Now, let's get to some numerical projections – and we'll see how well I do when the new data comes out.

Here's my first estimate—the minimum growth percentage for total cash compensation from 2024-2025 across the 14 positions I track. The data is based off weighted averages for the NBAA and Gallagher Surveys. (I cannot include averages from the IBM survey because distribution of it is limited to those who are participants in the survey.)

Position	Actual Growth 2023-2024	Minimum Projected Growth 2024-2025
	Weighted Average	Weighted Average
Captain	8.03%	6.06%
Chief Pilot	12.65%	7.77%
Director / Aviation Manager (Flying)	9.62%	7.07%
Director / Aviation Manager (Non-Flying)	15.15%	6.62%
Director of Maintenance	8.50%	5.51%
First Officer	16.00%	7.55%
Flight Attendant	5.79%	6.08%
Flight Coordinator/Office Manager	11.33%	5.75%
Maintenance Assistant/Line Service Tech	11.87%	6.09%
Maintenance Supervisor	16.56%	5.18%
Maintenance Technician	5.81%	3.09%
Scheduler	2.23%	3.51%
Senior Flight Attendant	8.65%	6.28%
Senior Captain	7.34%	6.46%
Overall	9.70%	5.93%

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I use the average growth over the last five years for each position, so in the raw survey data, I predict 2025's average total compensation levels will grow by a factor that is *at least* the rate presented in the right column.

Now, let's get down to where the cash meets the road. Here's what I predict the minimum average total cash compensation levels will be in the 2025 survey data.

Position	Actual TCC 2023-2024 Weighted Average	Minimum Projected TCC 2024-2025 Projected Average 2025
Captain	$204,723	$217,131
Chief Pilot	$261,813	$282,145
Director / Aviation Manager (Flying)	$320,846	$343,515
Director / Aviation Manager (Non-Flying)	$277,833	$296,216
Director of Maintenance	$203,631	$214,844
First Officer	$150,168	$161,509
Flight Attendant	$123,204	$130,696
Flight Coordinator/Office Manager	$125,885	$133,120
Maintenance Assistant/Line Service Tech	$81,966	$86,957
Maintenance Supervisor	$162,454	$170,861
Maintenance Technician	$117,188	$120,815
Scheduler	$89,069	$92,196
Senior Flight Attendant	$157,894	$167,816
Senior Captain	$248,496	$264,549
Overall	$182,387	$193,202

Now, keep in mind that these projections are the averages across all aircraft classes and they represent the minimum total cash compensation levels for each position.

So, there you have it! This is the first time that I can recall someone making concrete projections of what compensation levels will be in our industry. Keep a copy of this article handy because in the September column, we'll compare the actuals versus the projections.

Stay tuned!



About the Author

Dr. Chris Broyhill is an industry veteran with over 40 years in aviation. He graduated from the United States Air Force Academy in 1982, served with distinction for over 20 years in the Air Force and flew multiple aircraft. Read More...

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MONEY

Effectively Utilizing Roth Funding to Prevent a Potential Retirement Income-Tax Bomb!

Written by: Charlie Mattingly, MBA, CFP®



I was working with a client family recently and we took a moment to appreciate the fact that because they started saving in Roth IRAs and Roth 401(k)s at an early age, and accomplished smart Roth conversions along the way, there was a real chance that the vast majority of their retirement income could be tax-free.

Can you imagine it? Picture yourself in retirement and the only income taxes you may owe are from Social Security income! That would be incredible from a tax savings perspective, not to mention the potential peace of mind knowing that you could be protected from future income-tax rate increases regardless of what politicians decide to do.

Granted, this may be considerably more challenging for many folks that are late to the "Roth" game, but there is hope for you and if you're a youngish professional pilot, this low-tax environment could be your retirement reality.

First, a little background. Roth accounts, whether Roth 401k, Roth Thrift Savings Plan, Roth IRA, etc., are all funded with after-tax, non-tax-deductible contributions. This means the Roth IRA distributions, if all IRS requirements are met, will be tax-free. So why am I writing about something so simple? Because there is a price to pay to get money into Roth accounts and it's not easy to know if, and when the cost is worth it. To be more specific, the price you pay is oftentimes a forgone tax deduction at your current income tax rate. Furthermore, accumulating Roth may also mean saving significantly more than you already do in order to take advantage of the back-door Roth IRA strategy.

Eventually, paying income taxes at the highest airline income pay rates becomes so painful most pilots will do almost anything, legal or even borderline legal, to reduce their current taxable income. This may make sense for some periods of the airline pilot's financial lifecycle. But eventually if this all-or-nothing-reduce-my-income-taxes-NOW approach is not balanced with a reasonable consideration for future taxes in retirement, there may be a "tax bomb" waiting to go off when required minimum distributions (RMDs) kick in at age 73 or 75, depending on birth year.

Do your homework, or hire someone that does their homework, to make great decisions to balance the income tax burden now versus the potential retirement income tax bomb. As we sometimes say, it may be simple, but it's not easy!

Below are six strategies for effectively utilizing Roth accounts and thus working smartly towards the goal of a lower tax liability over the entirety of your life, not just while you're a senior captain at a major airline.

1. A Backdoor Roth IRA conversion is a strategy that allows high-income earners to contribute to a Roth IRA, even if their income exceeds the Roth IRA income limits. Here's how it works:

- First, you contribute to an after-tax, non-deductible traditional IRA, **which has no income limits. In other words, anyone can contribute to an after-tax IRA regardless of their income.**
- Second, convert to a Roth IRA: After making the contribution, you convert the funds from the traditional IRA to a Roth IRA. Since you made the traditional IRA contributions with after-tax money (as long as you don't deduct the contribution), you may pay little to no tax on the conversion if there's minimal growth between the two steps.

The Back Door Roth IRA strategy is especially useful for those who earn too much to contribute directly to a Roth IRA, but it requires careful planning due to tax implications, especially if you have other traditional IRAs that have any pre-tax contributions.

If you currently have a pre-tax rollover IRA from a previous employer's 401k, you may be able to "roll-in" this pre-tax IRA to your current employer's 401k retirement plan. Due to the IRS IRA aggregation rule, rolling in any pre-tax IRAs could potentially clear the path for future after-tax IRA contributions to be converted to your Roth IRA tax-free. Important reminder: Any investment gains will be taxable at your marginal income tax rate but not your contributions. For those interested in learning more about the IRS Roth IRA aggregation rule, please click here.

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2. Roth 401k. Unlike Roth IRAs, Roth 401(k) s do not have income limits. So, even if you earn a high income, you can still contribute directly to a Roth 401(k) if it's available through your employer. The downside to contributing to your Roth 401(k) is that you will potentially forgo a significant income tax deduction and voluntarily choose to pay taxes at your current marginal income tax rate. There are multiple factors that should be considered when deciding to utilize your Roth 401k. Here are just a few:

- Your time horizon. For example, it's almost a no-brainer for a brand new first officer to take advantage of the Roth 401k feature. It's a much more personalized and nuanced decision if you are older.

- Do you have a military pension? If so, this may change the amount of your required minimum distributions (RMD) that you actually need for retirement spending. I can attest that it makes people very angry to have to withdraw from their pre-tax 401(k)s and IRAs and pay taxes whether they need the income or not. Roth contributions or conversions reduce the RMDs since there are potentially less pre-tax savings.

- Your viewpoint on the potential for higher tax rates in the future is important. Some people feel very strongly that tax rates in the future will be higher than they are now. Admittedly, no one can be sure what future tax rates will be, but most reliable prognosticators believe they will be higher.

3. After-Tax Contributions to 401(k), aka Mega Back Door Roth IRA. This is an awesome opportunity to go above and beyond normal Roth savings opportunities. Here are the steps and variables to consider when evaluating the Mega Back Door Roth IRA.

- First make after-tax contributions to your 401(k) (above the standard pre-tax or Roth contribution limits). Several airlines currently allow this option: including Delta, United, American, Fed Ex and UPS. In 2025, the total 401(k) contribution limit (employee + employer + after-tax) is $70,000, not including catch-up contributions.

- Once the after-tax contributions are made, you can convert those funds into a Roth 401(k) or roll them over into a Roth IRA. The conversion or rollover happens without triggering taxes on the principal amount (since it was after-tax), but any investment gains will be taxable if you do not move quickly. The Mega Back Door Roth allows you to bypass the Roth IRA income limits, giving you a way to contribute much larger amounts to a Roth account.

4. Utilize the tax savings in your airline's Market Based Cash Balance Plan (Delta), HRA/RHA (United), Non-Qualified salary deferral plans (Southwest) to add more to your Roth 401k.

For example, if your airline has a retirement plan that accepts 401(k) excess spill cash or allows for salary deferral, consider offsetting the tax savings by contributing a larger portion of your 401k contributions to Roth. Yes, you could just get the larger tax deduction and go with it. However, the tax savings may allow you to benefit now as well as prepare for potentially higher future income tax rates by saving more Roth.

5. Convert potential inheritance to a Roth IRA.

Be sure to consider the tax consequences of potential future inheritances. We've seen several clients recognize that their aging parents are in a much lower income tax bracket than their own.

Imagine a scenario where a high-income airline captain in the 32% marginal tax bracket inherits one million dollars from their deceased parents. Because of the SECURE Act regulations Congress passed in December 2019, the pilot will be required to withdrawal all one million dollars within ten years.

This means Uncle Sam will potentially receive 35%-37% of the inheritance instead of 22%-24% had the parents converted their pre-tax wealth to Roth prior to their deaths. I realize this is slightly morbid planning, but there's no reason for Uncle Sam to receive ten to fifteen percent more ($100,000 to $150,000 in this example) of your money than they otherwise would have by executing smart tax planning.

6. Consider executing Roth IRA conversions once you retire or during any year (disability) where your income may be significantly lower than your normal airline income.

Clearly, anytime your income is lower, and you convert pre-tax IRA or 401(k) monies to Roth, you will pay a lower tax rate on the conversion. This is because the taxable portion of the Roth conversion will be taxed at your marginal income tax rate. Here are some pros and cons for Roth conversions upon retirement, especially if your income is lower than pre-retirement.

- Lower Required Minimum Distributions (RMDs): Traditional IRAs require RMDs starting at age 73 (for most retirees). Roth IRAs do not have RMDs during your lifetime.

- Tax Diversification: Building a pool of tax-free money can give you more control over your tax bracket in later years.

- As stated before, heirs benefit: Roth IRAs passed to heirs can grow tax-free, and withdrawals may be more favorable for them.

- Use caution and be sure to understand that converting too much can push you into a higher tax bracket or increase Medicare premiums (via IRMAA surcharges).

- Strategic conversions over multiple years (a "conversion ladder") can spread out the tax hit.

- Ideal time: Early retirement (before RMDs and Social Security kicks in) when income may be low.

- It is best to pay the tax with money outside the IRA to maximize tax-free growth inside the Roth. Using IRA funds to pay the tax reduces the benefit of the conversion.

Hopefully, you found this article interesting and helpful. If you have any questions, contact us at 865-240-2292 or Charlie@leadingedgeplanning.com.



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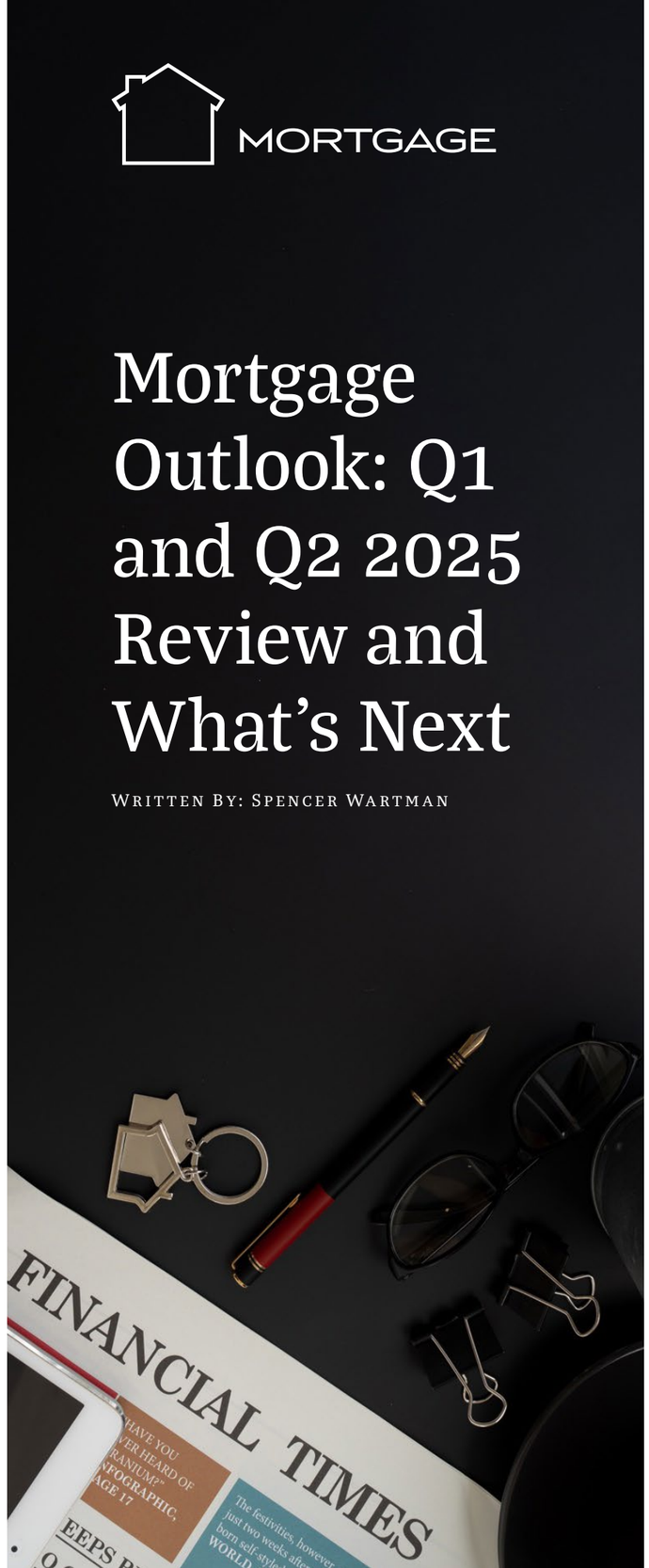
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MORTGAGE

Mortgage Outlook: Q1 and Q2 2025 Review and What's Next

WRITTEN BY: SPENCER WARTMAN



The first half of 2025 seemed to be consistent with what I discussed at the beginning of 2025. My aimpoint in this article is to illustrate data and share some thoughts as we look ahead into the rest of the year. With interest rates shifting alongside the Treasury market, staying ahead means understanding current conditions and what to expect throughout 2025, especially if you're looking to buy a home.

1. To Now in 2025

- **30-year conventional fixed mortgage rates** have eased slightly, sliding from earlyyear highs above 7% to about **6.84%** as of mid-June, per Freddie Mac—still high compared to pandemic lows, but trending down.

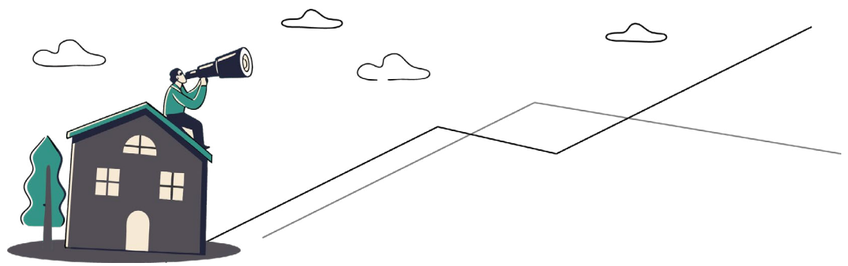
- **VA loan rates** typically track a bit below the 30-year fixed average. As of midJune, VA loans are floating in the **6.25–7.25%** range (national average), although there are lenders that are consistently below that.

- **10-year Treasury yields**, a backbone for mortgage pricing, currently hover around **4.43–4.48%** slightly down from April's 4.5%+ highs, stabilizing in mid4% territory.

- Overall, there are very wide ranges, which is consistent with the volatility of the national and political changes in these times.

2. Why the Treasury Yield Connection Matters

Treasury yield → mortgage rate link: mortgage lenders price longterm loans based on the 10-year Treasury yield plus a spread. As yields fall, so do mortgage rates—benefiting pilots planning to buy or refinance.



3. Forecast for the Rest of 2025

- **10-year yields**:
  A Reuters poll predicts yields will gradually decline from ~4.48% now to about **4.35% in three months** and **4.29% in six months**. Some forecasts suggest yields could drop further—possibly into the low-4% or high-3% range by year's end. Let's hope for that!

- **Mortgage rates**:
  - **Fannie Mae** projects 30-year conventional fixed averages dipping to **6.1% by Q4**.
  - **Forbes Advisor** sees a modest slide toward the **mid6s** through Q3Q4 2025.
  - **Experts** expect mortgage rates to stay between **6–7%** in 2025.

- **VA loans** should mirror this trend—starting around **6.25–7.25%**, likely drifting lower toward the **6% range**, if Treasury yields ease as expected. Again, there are lenders who are consistently below this trend for VA rates.

4. What Should Be Done Now

- **Timing**: If you're tying the knot with a home purchase or thinking about refinancing, current VA and conventional mortgage rates are near peak 2025 levels. Expect them to drift lower; if you have the flexibility for it, waiting could save thousands.

- **Monitor Fed signals**: Markets expect **1–2 Fed rate cuts** later in 2025. Normally, more cuts equal lower Treasury yields → lower mortgage rates.

5. The Breakdown and (hopeful) Prediction

Item	Now	End of 2025 (Forecast)
10-yr Treasury	~4.45%	~4.3–4.0% (possibly mid3s)
30-yr mortgage	~6.84%	~6.1–6.4%
VA loan	~6.25–7.25%	Likely mid-6s

This is always welcome news for homebuyers, so hopefully it will happen! While a few tenths might seem small, on a $400K loan, even a 0.25% rate drop can shave off $100+/month. Mortgage rates and 10-year Treasuries have shown volatility in mid-2025. Hopefully, with Fed cuts likely ahead, mortgage rates could ease into the mid/low-6s by year-end. Timing your financing for later this fall could mean major savings over financing now. Stay informed about economic indicators and Fed announcements if you are planning your relocation. Working with a lender who specializes in airline pilot pay, conventional, investment, and VA loans is crucial to ensuring you get the best deal for you and your family. We are here for you!



About the Author

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Trident Home Loans (Equal Housing Lender, NMLS 65716) is an airline industry leader for securing the right mortgage for you. Contact Spencer Wartman (NMLS 2109932) at spencer@mythl.com or spencerattrident.com and let him help you secure your future home! You are invited to reach out to Spencer directly if there's a topic you'd like for him to touch on.

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Helping Dreams Take Flight, One Step at a Time

Pilot John Bird's Mission to Fly, Run, and Give Back

Written By: Sarina Williams

John Bird, an Air Canada 787 captain based in Vancouver, doesn't let a busy flight schedule stop him from staying active. "I can just throw a set of shoes in there," he said, referring to how he uses layovers to get in his miles. With more than 25 marathons under his belt, Bird has merged his love of running with his aviation career and a passion for giving back.

This year, John Bird became a symbol of innovation and generosity when he completed a half marathon in his full pilot uniform, luggage in tow, to raise funds for Dreams Take Flight, a Canadian charity that gives children facing physical, mental, or emotional challenges the trip of a lifetime. Running in full regalia, Bird raised over $18,000 CAD and brought nationwide attention to both his cause and his clever approach to merging identity with impact.

The Idea Behind the Uniform

The inspiration for Bird's uniformed run came during his participation in the London Marathon, a renowned event for its colorful fundraising efforts and Guinness World Record attempts. "You see everything from people running in ski boots to giant fruit costumes," Bird recalled. Curious, he researched the Guinness record for running a half marathon in a pilot's uniform. When he saw that the category was open for challengers, he saw an opportunity.

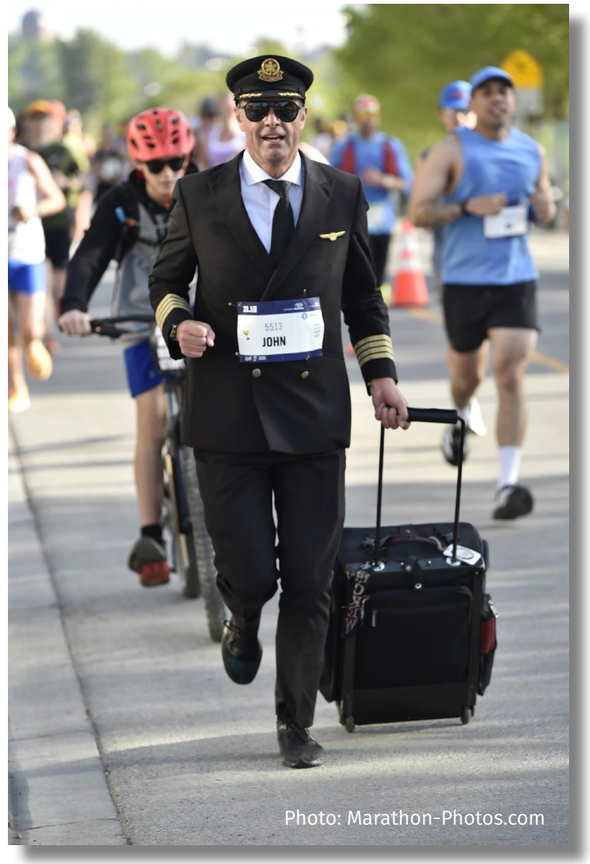
"I thought it would be a neat way of connecting my professional life and personal life with a charity that involves so many aviation professionals," said Bird.

Bird reached out to Dreams Take Flight, a nonprofit he had previously donated to but never worked with directly. The organization, which has been operating since 1989, charters Air Canada aircraft once a year to take children with special needs to Disneyland or other magical destinations, providing them with an unforgettable experience they might otherwise never enjoy.

"It felt like a perfect fit. The idea just took off," Bird happily shared.

Race Day

The run itself, part of the Calgary Marathon series, began at 7:00 AM. Bird wore his full pilot uniform, complete with shirt, tie, hat, aviator sunglasses, and a rolling bag.



"It was hot," he admitted. "I was sweating right down to my socks. But the crowd support was spectacular. I don't think I went more than a few hundred meters without someone shouting encouragement."

The uniform met Guinness' minimum standards: the shirt, epaulettes, pilot's hat, and aviator sunglasses would have sufficed. But Bird went further, bringing his real work bag to enhance the authenticity and challenge.

"The bag rolled surprisingly well. I used my personal Luggage Works Stealth 22 bag with

Gear That Goes the Distance

Bird's unique race attire has sparked some interest. It's not every day that pilot gear is put to the test of a half marathon.
For the run, he wore:

Uniform: His actual Air Canada pilot uniform, including shirt, tie, trousers, hat, and epaulettes.

Bag: Bird pulled his personal Luggage Works Stealth 22 with a carbon fiber frame and signature rugged wheels.



Running Shoes: Lightweight black race shoes suitable for marathons, chosen specifically to resemble his work footwear while offering the support needed for performance.

Captain John Bird trained in full uniform to prepare for the Calgary half marathon. // Photo: Ann-Marie Penny

the carbon fiber frame and Luggage Works wheels. It hummed along and probably could've done a full marathon," he said proudly.

His footwear? Not his work shoes. "I wore a pair of racing shoes I had just used in the Boston Marathon. They're black, so they looked pretty close to my work shoes, which kept the look professional."

Captain John Bird completed the half marathon in 1 hour, 43 minutes — well under the 2-hour Guinness World Record limit. Understandably, it was a bit slower than his best time of 1 hour, 23 minutes.



Photo: Marathon-Photos.com

A Flight Worth Taking

Dreams Take Flight isn't just about getting on an airplane. It's about giving children an experience filled with joy, normalcy, and wonder. Each chapter of the organization across eight Canadian cities works tirelessly to orchestrate a single annual trip, providing support to children facing unique challenges.

Bird explained,

> "Many of these kids have never flown before. A lot of them can't travel without large medical or emotional support groups. Dreams Take Flight charters an Air Canada jet, assembles a huge volunteer team, and makes it all happen. It's really powerful. They vet the kids to ensure the experience will be beneficial. They even compile a memory book with photos from the trip and present it to each child before they head home. The level of care is incredible."



Dreams Take Flight bringing children on the trip of a lifetime. Photo: CNW Group/Air Canada



Air Canada and Dreams Take Flight Vancouver Team Up to Make Magical Memories Through Once-in-a-Lifetime Flight // Photo: CNW Group/Air Canada

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From Layovers to Laps

Bird has long woven running into his life as a pilot. “I started running in high school, like a lot of people. Life took over for a while, but once I began flying professionally, it became the perfect layover activity,” he said.

Running offered both a break from routine and a way to stay fit on the road. Since running his first marathon in Toronto in 2013, Bird has completed over 25 marathons, countless half-marathons, and even became a certified running coach.
“I started mentoring other runners. It’s been a natural extension of something I love. I especially enjoy running in cities where the weather contrasts with Canadian winters, like LA in January.”

He often packs a simple running kit in his travel luggage, proving that fitness doesn’t have to fall by the wayside when working a job with unpredictable hours and far-flung destinations.

At 49 years old, Bird balances his career, his love for running, and family life as a father of four. He often runs alongside his wife Claire, also an avid runner, and together they’ve completed most of their marathons side by side.

Community, Charity, and the Next Challenge

Bird’s run in uniform didn’t just raise funds, it captured attention far beyond the finish line. “Oftentimes, I get on a flight now and there’s at least one person who asks, ‘Are you the guy who ran in uniform?’” he chuckled.

The Calgary running community also embraced him. As a pace runner for the Calgary Marathon in previous years, Bird knew the event and the people behind it. Their support, combined with the warm reception from the Dreams Take Flight team, made the entire journey especially meaningful.

He also received an outpouring of support from his colleagues within the aviation industry, especially fellow crew members and staff at Air Canada. Bird, who has been a pilot at Air Canada since 2006, said, “Many coworkers donated generously and shared the campaign widely. It really speaks to the tight-knit nature of the aviation community. Even though we’re spread across flights and time zones, they showed up in full force. It reminded me how connected we really are.”

As for what’s next?

“I might need to find a new challenge. Maybe a longer distance, or perhaps another unique outfit,” he joked. “But if it can raise money and awareness again, I’d absolutely do it.”

One of the most touching elements of Bird’s story is how it illustrates the intersection of seemingly unrelated worlds: aviation, competitive running, and child-focused philanthropy. His efforts have brought attention to a longstanding but lesser-known charity, sparked broader conversations about community service in the pilot community, and demonstrated how personal passion can fuel powerful change.
He didn’t need corporate sponsorships or flashy campaigns. Just his uniform, a good pair of shoes, and a heart ready to run.

To support Dreams Take Flight or learn more about their work, visit: dreamstakeflight.ca

Follow the Calgary chapter on Instagram for updates and stories from the children they serve



About the Author

Sarina Williams is the layout designer for Aero Crew News and creative director for Riza Marketing. She earned her BA in Advertising/Public Relations from the University of Central Florida. Read More...



Air Canada Joins Forces with Dreams Take Flight Calgary to Create Unforgettable Experiences for Children
Photo: CNW Group/Air Canada



Photo: Markus Mainka / Shutterstock.com

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