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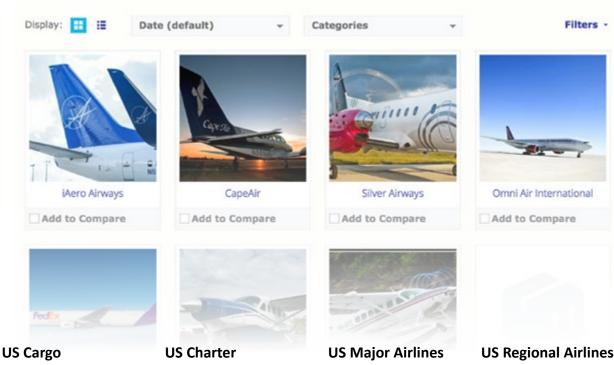




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Dear readers,

Happy New Year and welcome to 2022! It's hard to believe that 2021 is over! Time flies when we're flying! It's amazing how busy the airports are. What a difference a year makes! It's unfortunate that we are now dealing with a new COVID variant, which is causing staffing shortages and in turn, airlines are having to cancel flights. On the good-news front, the daily TSA checkpoint numbers are almost double those of 2020, plus the CDC has amended its guidelines for recommended isolation time from ten days down to five days. (You can read more about this at <u>CDC.gov.</u>) Hopefully, these new recommendations will help crews get back into the air faster to keep flights from having to be cancelled. While we are all weary of this pandemic, it's the time of year we look ahead with positive attitudes and faith that things will get better. 2021 was better than 2020 and I'm confident that 2022 will be an improvement over 2021. Join me in spreading good vibes.

Fly Safe,

Craig D. Tiepen

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 First Officer for a major airline with a type rating in the Boeing 737 & Embraer 145 and has logged over 8,000 hours of flying time since his introductory flight on November 14th, 1992.

December 2021

Last month, the ACN-RAA 2021 Photo Contest came to a close! And announced that our Grand Prize winner was Ian H. from Kingwood, TX. His photo, titled the Royal Megaliner, is of an A380 coming out of the clouds on final approach into IAH. It was taken last year just as the COVID-19 pandemic was causing shutdowns. Most A380's have since been grounded, but Singapore Airlines announced in October that they will resume flying their A380s in November. Qantas Airways announced in November that they will start flying their A380s in 2022 from Sydney to Los Angeles.





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United Takes Pilot Development to Greater Heights: United Aviate Academy's First Class to Start Dec. 6 at New Training Facility in Phoenix

United's wholly owned subsidiary, United Aviate Academy, leases state-of-the-art flighttraining facility and fleet of Cirrus aircraft at Phoenix Goodyear Airport

United Airlines announced on December 3rd the inaugural class of 30 <u>United Aviate Academy</u> students began their studies on Dec. 6 at the new flight training academy at Phoenix Goodyear Airport. The first class, 80% of whom are women or people of color, will complete a rigorous, year-long training program that sets them up for a career that reflects United's high standard of professionalism and deep commitment to delivering a safe, caring, dependable and efficient travel experience. United Aviate Academy received more than 7,500 applications from aspiring pilots around the country in less than six months, with nearly 75% of those applicants being women or people of color.

After completing their training at the academy, students will build flight and leadership experience while working within the Aviate pilot development ecosystem at partner universities, professional flight training organizations and United Express carriers on their way to becoming United pilots.

"We are thrilled to welcome our first class of students to the academy's new home at **Phoenix Goodyear airport,"** said Mary Ann Schaffer, United's chief pilot and member of the United Aviate Academy board of directors. "The facility ensures we have the resources to expand our training capabilities and that the next generation of aviators will receive industry-leading training toward their goal of becoming a pilot for United Airlines."

Following the inaugural class, United Aviate Academy anticipates welcoming between 25 and 50 new students each month and expects to train at least 500 students yearly, with a goal for at least half of those being women or people of color. United currently expects to hire at least 10,000 pilots by 2030.

United Aviate Academy at Phoenix Goodyear Airport

The state-of-the-art, 340,000 square-foot facility at Phoenix Goodyear Airport, which United Aviate Academy will lease from the city of Phoenix, will provide aspiring pilots with industry-leading resources, equipment, and accommodations. The facility was previously home to Lufthansa Aviation Training (LAT), and United Aviate Academy will sublease part of

its facility to LAT, a wholly owned subsidiary of Lufthansa, a United Star Alliance partner. Other advantages the facility will offer to United Aviate Academy include:

- Leasing a fleet of late-model Cirrus SR-20 series single-engine aircraft, which feature advanced safety characteristics
- Nearly 50,000 square feet of office space
- Multiple aircraft hangars
- Dormitory rooms for student housing with ample room for expansion
- Proximity to many auxiliary airfields in the Phoenix area
- Favorable weather for year-round flight training

For more information on United Aviate Academy, please visit unitedaviate.com or @ unitedaviate on Instagram.



United Airlines and Virgin Australia Group Announce New Partnership

Beginning early 2022, United customers can access convenient one-stop connections to Australia's top destinations while enjoying the benefits of MileagePlus membership and more

United and Virgin Australia Group announced on December 13, 2021, a new partnership that will enhance the travel experience between Australia and the Americas. This partnership will add more benefits for both MileagePlus and Velocity Frequent Flyer members as well as access to more one-stop connections to cities across the United States, Australia, Mexico, the Caribbean, and South America. The agreement, which is subject to government approval, is set to roll out starting in early 2022.

Australia has always been a key part of United's network as demonstrated by United being the only carrier to maintain passenger service between the U.S. and Australia throughout the pandemic. In addition, United offers more flights to Australia than any other U.S. carrier and now extends its presence by adding Virgin Australia Group's comprehensive network.

"The United States and Australia share a special bond and I'm especially proud that United was the only airline to maintain a vital link between these two countries throughout the pandemic," said United CEO Scott Kirby. "Looking ahead, Virgin Australia is the perfect partner for United. Our partnership provides considerable commercial value for both airlines and a shared commitment to offer the best travel experience for our customers."

United currently offers daily direct flights from San Francisco and Los Angeles to Sydney, while other services including flights from Houston and direct services to Melbourne are expected to resume later in 2022. Under this new partnership, United's customers will now have access to top Australian destinations including Brisbane, Perth and Adelaide.

In addition to the ability to redeem and earn points/miles, eligible premier MileagePlus and Velocity members will also receive the following benefits when flying on United and Virgin Australia worldwide:

- Priority check-in
- Priority boarding
- · Priority baggage delivery and additional baggage check allowance
- Priority security clearance
- Lounge access

The partnership will also triple Virgin Australia's reach into the U.S., with customers accessing United's vast domestic and international network, connecting at United's multiple Australian gateways.

The partnership is another significant customer enhancement for the relaunched Virgin Australia, that will also see the airline resume the sale of codeshare flights at <u>virginaustralia.com</u>, starting with United services in early 2022, followed by the airline's other international partners. Virgin Australia first paused the sale of codeshare flights on its website at the height of the pandemic, and this announcement will open a new gateway for travel between Australia and the U.S. and beyond.

"We are grateful to have such a strong partner in United," said Virgin Australia Group CEO Jayne Hrdlicka. "They have proudly been one of Australia's most loyal and long serving aviation partners and their market strength both to Australia and in the United Statesbrings great value to our guests. We look forward to innovating together on behalf of our quests to ensure they have the very best travel experiences to over 90 destinations in the U.S."



Delta unveils custom aircraft livery to celebrate 8-year commitment as official airline of Team USA

Delta Air Lines on Friday unveiled its custom Team USA aircraft livery honoring the global carrier's commitment to connect athletes with their dreams as the official airline of Team USA. The Team USA-inspired A330-900 celebrates Delta's new eight-year partnership with Team USA, which runs through the LA28 Olympic and Paralympic Games.

"Delta and Team USA share a deep belief that connecting the world makes us all better," said Tim Mapes, Chief Marketing and Communications Officer, Delta. "This one-of-a-kind livery celebrates our partnership, which has been built on shared values and the inspiring athletes of Team USA, whose indomitable spirit lies at the heart of both our 'Keep Climbing' message and the Olympic and Paralympic Movement."

The custom livery was designed by Shane Edwards, Delta's Product and Experiential Design Manager, in collaboration with the airline's in-house creative team, Window Seat. Unique Team USA design elements that are incorporated throughout the livery were developed by Carey McKay, Delta Art Director and Graphic Designer, and will also be featured in various Delta visuals, materials and platforms both in flight and on the ground.

"The team opted for a clean, classic design to promote the partnership between Team USA and Delta," Edwards said. "The Team USA logo is prominently featured, along with a blue gradient that represents the sky and 'rise to the top' with a grounding red element representing the resilience needed to get there."

The custom paint design, which will start flying Dec. 18, will be assigned primarily trans-Atlantic and trans-Pacific routes. Serving Delta's commitment and path to a more sustainable future, the A330-900 is a key part of Delta's widebody fleet renewal plan and is 21% more fuel efficient per ASM than the 767s it replaces in the fleet. The plane encompasses Delta's enduring support for Team USA and its pursuit of excellence.

To further its commitment to Team USA, Delta has also proudly partnered with six inspiring athletes on their journey to the Beijing Winter Games, Delta and Team USA have a shared drive to be the best, and the airline will support these athletes both on and off the field of play, celebrating their stories of resilience and perseverance as they pursue their Olympic and Paralympic dreams.

U.S. Olympians and hopefuls:

Maame Biney: Short Track Speed Skating from Reston, Virginia Born in Ghana and relocated to the U.S. at the age of five with her father, Maame burst on the scene in 2018, becoming the

first African American woman to qualify for the U.S. Olympic Short Track speed skating team and winning the 500m team trial at just 17 years old.

- Amber Glenn: Figure Skating from Plano, Texas Amber is a U.S. Junior Champion (2014) and recently finished second at the 2021 U.S. Championships. In 2019, Amber came out as bisexual/pansexual—just the third woman to come out in her sport—and faced stereotypes headon while standing as an advocate for representation in her sport.
- Breezy Johnson: Alpine Skiing from Jackson Hole, Wyoming Breezy made her Olympic debut in 2018, finishing seventh in the downhill and 14th in Super-G. She has persevered through three leg injuries in the past four seasons to come back to four straight podium finishes.

U.S. Paralympians and hopefuls:

Dan Cnossen: Para Nordic Skiing from Topeka, Kansas As a U.S. Navy Seal, Dan stepped on an IED and lost both his legs in the blast, later being awarded the Purple Heart and Bronze Star with Valor. He was a member of the 2014 and 2018 U.S. Paralympic Teams, winning one gold, four silver and one bronze medal, earning him the honor of Best Male Athlete of the Games.

- Jen Lee: Men's Sled Hockey from Denver Jen was introduced to sled hockey in 2009 following a motorcycle accident that required his left leg to be amputated. He was a member of the Gold Medal winning sled hockey teams at the Paralympic Games Sochi 2014 as well as the Paralympic Winter Games PyeongChang 2018.
- Oksana Masters: Para Nordic Skiing from Champaign, Illinois
 Oksana was born in Ukraine with significant birth defects due to radiation from the Chernobyl nuclear disaster. A double leg amputee, Oksana has won ten medals at the Paralympic Games in 2012, 2014, 2016, 2018 and 2020 in rowing, skiing and hand cycling.

Delta revealed the new livery at an event Friday hosted by Olympians Tara Lipinski and Johnny Weir near its global headquarters in Atlanta. Nearly 600 employees were in attendance as Delta CEO Ed Bastian unveiled the aircraft livery alongside LA28 Olympic and Paralympic Games Chairperson Casey Wasserman. Olympic Legends Apolo Ohno (Speed Skating) and Vonetta Flowers (Bobsled) were also on hand for the first look, alongside Cnossen, Glenn and U.S. Paralympian Mallory Weggemann.

"I'm very proud to partner with Delta on the road to the upcoming Olympic and Paralympic Winter Games," Cnossen said. "Its support is invaluable, especially as I approach my third Paralympic Games, and it is very exciting to see how they will celebrate Team USA through the new livery design. Delta is all about

helping people's dreams take flight, whether you're an Olympic or Paralympic athlete or an everyday traveler. This plane is one of many ways Delta will bring the Olympic and Paralympic spirit to life in the air and on the ground—and as an athlete, I'm honored to be a part of this journey."

As Team USA's official airline, Delta will manage travel for U.S. Olympians and Paralympians to Beijing 2022, Paris 2024, Milano Cortina 2026 and LA28, where it also is an inaugural founding partner. The first Beijing-bound flight will depart in January from Los Angeles International Airport and operate as a charter in order to meet Chinese government entry requirements. Delta's charter flights are the only way Team USA athletes and staff will travel to Beijing 2022 from the U.S.

"Even through a global pandemic, Team USA athletes have endured and thrived in pursuit of the Olympic and Paralympic dream," said Bill Wernecke, Managing Director – Charter Operations. "We are proud to carry this extraordinary team into competition and we look forward to being the first to welcome them home."

The partnership with Team USA furthers the global airline's longstanding support for sport—and its proud history supporting Team USA at the Olympic and Paralympic Games. Delta served as a past sponsor of the Olympic and Paralympic Games in its hometown in the Atlanta 1996 and Salt Lake City 2002.



Alaska Airlines expands oneworld partnership with new West Coast international flights

New service includes Portland-London on British Airways and Seattle-Helsinki on Finnair; oneworld airlines will fly 100 weekly nonstops this summer between West Coast and Europe

Ready to start planning that long-awaited, much-deserved vacation or trip to Europe and destinations beyond? Alaska Airlines and our fellow oneworld member airlines – including American Airlines, British Airways, Finnair and Iberia – are ready to take you there this summer with new nonstop international flights from our West Coast hubs and airports.

British Airways announced on December 13, 2021 it will begin nonstop service from Portland to London Heathrow five days a week starting on June 3, 2022. The flight becomes the sixth British Airways service to London from a key Alaska market on the West Coast joining Los Angeles; San Diego; San Francisco; San Jose, California; and Seattle.

Finnair announced the week of December 6, 2021 its new nonstop flight between Seattle and Helsinki that's scheduled for service three days a week beginning June 1. Finnair's nonstop to Seattle joins its existing service to the Finnish capital from Los Angeles. Finnair will also increase its Los Angeles-Stockholm service to four nonstop flights a week beginning May 1.

By summer 2022, Alaska's oneworld partners will offer more than 100 nonstop flights every week from the West Coast to Europeincluding nonstop service to London, Madrid, Barcelona, Stockholm and Helsinki. Once in Europe, journeys can continue throughout the Continent and other parts of the world with convenient connections through our partners' hubs.

"By deepening our partnerships with oneworld alliance members, we're providing exciting travel opportunities to Europe and beyond," said Nat Pieper, senior vice president of fleet, finance and alliances at Alaska Airlines. "Our guests will love the 100 weekly nonstop flights between our West Coast gateway airports and major European cities, enjoying oneworld benefits along the way."

"Since joining oneworld in March, Alaska Airlines has positioned oneworld as the leading alliance on the West Coast," said Rob Gurney, oneworld CEO. "With the new oneworld member airline flights to Europe and extensive connections at Alaska's hubs, the possibilities are endless for customers planning that long-awaited trip to Europe."

oneworld flights between the U.S. West Coast and Europe for summer 2022:

oneworld Partner	City Pair	Frequency
American Airlines	Los Angeles – London Heathrow	2x Daily
	Seattle – London Heathrow	Daily
British Airways	Los Angeles – London Heathrow	2x Daily
	San Diego – London Heathrow	Daily
	San Francisco – London Heathrow	2x Daily
	San Jose, CA – London Heathrow	5x Weekly
	Seattle – London Heathrow	2x Daily
	Portland – London Heathrow	5x Weekly
Finnair	Los Angeles – Helsinki	3x Weekly
	Los Angeles – Stockholm	4x Weekly
	Seattle – Helsinki	3x Weekly
Iberia	Los Angeles – Barcelona	4x Weekly
	Los Angeles – Madrid	5x Weekly
	San Francisco – Barcelona	4x Weekly

Many of the benefits MVP elite flyers on Alaska currently enjoy with their status seamlessly carry over to the <u>oneworld tiers</u> when they travel on any of the 13 member airlines. Those guests can take advantage of a variety of privileges, including priority check-in, access to international first and business class lounges, preferred boarding, fast track through security, baggage benefits and more.

With Alaska's highly-acclaimed Mileage Plan program, our flyers can earn and redeem miles with more than 20 oneworld member airlines and additional airline partners for travel to more than 1,000 destinations around the world.

Alaska remains committed to <u>Next-Level Care</u> for our guests and employees by implementing more than 100 ways to maintain the highest standard of safety – from clean planes to clean air in the cabin with hospital-grade air filtration systems. For everyone's safety on board, Alaska continues to enforce the federally mandated mask policy, even for those who are fully vaccinated.



Embraer's Eve and Nautilus Aviation partner to develop Urban Air Mobility operations in Australia

Eve Urban Air Mobility Solutions (Eve), an Embraer company, and Nautilus Aviation, a division of Morris Group and Northern Australia's largest helicopter operator, today (December 4, 2021) announced a partnership focused on accelerating the development of the Urban Air Mobility (UAM) ecosystem in Australia. The partnership will see the introduction of Eve's electric vertical takeoff and landing aircraft (eVTOL) serving some of Queensland's most iconic tourism attractions including the Great Barrier Reef.

As part of the partnership, Nautilus has ordered 10 of Eve's eVTOL aircraft, with flights taking off over the Great Barrier Reef by 2026. Morris Group Founder and CEO, Chris Morris said the new partnership with Eve accelerates the progress towards 100% of scenic flights over the Great Barrier Reef coming from zero emission electric aviation and is in line with Morris Group's commitment to reach net-zero emission by 2030 across all of its businesses.

"This partnership is an exciting development for Nautilus Aviation and Morris Group. We believe economic success and environmental sustainability go hand-in-hand and aim to strengthen and enrich the environments in which we work. Eve's eVTOL technology will integrate seamlessly into our operations to deliver a range of exciting zero-emission tourism experiences," said Mr. Morris.

Nautilus Aviation CEO, Aaron Finn said
Nautilus has had an Advanced Ecotourism
Certification for 8 years, however it has
been hard to avoid the biggest impact of
greenhouse gas emissions from the burning
of fuel in the company's helicopters. "This will
allow us to provide emission-free and quiet
tours over the Great Barrier Reef, providing an
unmatched eco experience to our customers,"
Mr. Finn said

Andre Stein, President and CEO of Eve, said the initiative was an important milestone for the company: "Our partnership with Nautilus Aviation and Morris Group will see Eve aircraft serving Australia's iconic tourism attractions with sustainable, zero emissions low-noise,

journeys. We share the same vision toward a carbon neutral future for air mobility and this a great use case for the solutions Eve is bringing to the market, including our 100% electric eVTOL and comprehensive customer support and air traffic management solutions."

Benefitting from a startup mindset and backed by Embraer's more than 50-year history of aircraft manufacturing and certification expertise, Eve unveils a unique value proposition by positioning itself as an ecosystem partner by offering a suite of products and services with the highest levels of safety standards. Eve's human-centered, eVTOL design combines disruptive innovation and a simple and intuitive design. In addition to the aircraft program, Eve is harnessing the expertise of both Embraer and Atech, a subsidiary of the Embraer Group, in providing globally recognized air traffic management software to create the solutions that will help safely scale the UAM industry going forward.

Follow Embraer on Twitter: @Embraer



Brazil's Federal Police receive Embraer's E175 jet

In a ceremony held on December 8, 2021 in the Aviation Coordination (CAV) hangar in Brasília, Brazil's Federal Police celebrated the arrival of the first of two E175 jets, which will soon begin operating in the country. The second jet of the E175 model is expected to be delivered to the Federal Police in 2022.

"The introduction of the E175, a modern and efficient jet, will further expand the scope of our main missions, such as deploying agents to fight organized crime operations, transferring detainees, moving equipment and cargo," said the Director-General of the Federal Police, Paulo Gustavo Maiurino.

The partnership between Embraer and the Federal Police spans more than 15 years, since the entry into operation of two ERJ 145 jets in 2006, both of which are still operating with the Federal Police. As well as current aircraft, the E175 will also be able to support other security forces in the country, being an asset that boosts not only Federal Police operations but those for the entire sphere of public security under the Federal Government.

"We are proud that the Federal Police has chosen to operate the E175 jet, which will be the largest aircraft in the country used for public security, adding capacity in the transport of passengers and cargo, in addition to increasing flight range, which expands the number of missions the Federal Police can perform," said Jackson Schneider, President and CEO of Embraer Defense and Security.

As it is an aircraft that previously operated in the United Kingdom before being handed over to the Federal Police, the E175 went through numerous adjustments at OGMA, an Embraer Group company in Portugal. Here the aircraft had all maintenance work done to resume operations and comply with Brazil's operational requirements, in addition to being repainted.

Follow us on Twitter: @Embraer





JetBlue Inflight Crewmembers Approve Five-Year Agreement

JetBlue with its inflight crewmembers, represented by the Transport Workers Union (TWU), announced on December 13th, 2021 the ratification of a five-year contract.

"I appreciate the hard work and dedication of both the TWU and JetBlue negotiating teams in coming to an agreement that is fair for our inflight crewmembers and that allows JetBlue to continue to grow, compete and succeed," said Ed Baklor, head of customer care and programs for JetBlue. "Thank you to our entire inflight team for their continued professionalism throughout the negotiation process and every day."



Flying for change

As part of American's ongoing pilot recruiting efforts, the <u>American Airlines Cadet Academy</u> (AACA) team is working hard to expand awareness of the pilot career in communities across the United States. Just in the past few months, the team has participated in numerous community events geared at educating youth on the opportunity of a promising career in aviation.

One such event was the Experimental Aircraft Association (EAA) Young Eagles Rally and Fly-in in Marlin, Texas, where the AACA team met with local middle school-aged youth from underserved communities.

"Our goal is to increase accessibility to the pilot career path through educational and mentorship opportunities like this one," said Brad Morrison, Manager of Pilot Recruiting and Development. "There's nothing quite as fulfilling as meeting young people who have never stepped on an airplane before, much less believed a career as a pilot was an option for them."



Nearly 50 airplanes flew into the small airport so that hundreds of aviation hopefuls - more than double last year's attendance - could enjoy a fun-filled day of pancakes, sunshine and discovery flights. For many of the kids, this was, in fact, their first-ever inflight experience, which built lifelong memories and created new dreams of a future career in aviation.

"I'm grateful we can play a role in these kids' paths to, hopefully, becoming aviators," said Morrison. "After that weekend, I'm certain that our industry's future and the next generation of pilots will be incredibly bright."

Even more recently, in Mesa, Arizona, the AACA team partnered with <u>CAE Flight Academy</u>, one of American's flight school providers, to host an educational, hands-on session for similar but slightly more advanced groups — aspiring pilots without any previous flight experience and current pilots not yet affiliated with any airline programs.

"Extensive involvement in the communities we serve plays a pivotal role in our longterm success as an airline and facilitates growth and diversification within the pilot **profession,"** said Capt. Cory Glenn, Director of Pilot Recruiting at American. "Our pilots are passionate, intelligent leaders. Each one can emotionally replay their journey — from imagining what it would be like to be a pilot, gaining an opportunity to visualize and achieve that possibility and then focusing that vision to becoming an American Airlines team member. If we can be that moment for even just a few kids and young pilots, we're making a difference."

All three of American's wholly-owned regional carriers — Envoy, Piedmont and PSA — attended the CAE event. Attendees had the chance to visit the CAE flight school facility, tour aircraft, take simulator rides and meet current American Airlines cadets and instructors. For those who had already applied, the team was also able to fast-track their AACA applications and conduct on-site interviews.

"Our goal is to measurably grow and diversify the pilot population and remove the mystery and barriers to be successful in qualifying for this profession," added Capt. Glenn. "We're doing that better than anyone. And we are just getting started with the growth and positive change to come."



A Master Joins King Schools

"Learning pilots benefit greatly from Brian Hough's approach to course design," says King Schools CEO, Barry Knuttila. "It is similar to ours at King Schools: Make sure each component of any complex subject is clearly understood before proceeding to the next,"

Landing, which is the most daunting challenge for any new student, is an example. "No book dissects that last 50 feet," Brian Hough says. "You need to break it down to make it easier for a student who may be overwhelmed and terrified at seeing that concrete rushing up."

"Just flying round and round while the student tries to figure it out," he continues, "is not an efficient way to teach. As with any complex subject matter, you have to divide it up into manageable pieces. First demonstrate and have the student control only the throttle. Then only the rudder. Then, when the student is comfortable with all the parts, put them together."

With undergraduate and master's degrees in aeronautics, Hough has devoted his entire career to flight training, not only of student pilots but also of flight instructors. A nationally recognized authority, he has served as Chief Instructor at several large flight schools, traveled to India and China to host seminars and develop training curricula, and designed and gained FAA approval for performancebased reduced-time Part 141 Training Course Outlines for Private and Commercial students and for the coveted Restricted ATP. His approach to teaching landings is typical of his sensitivity to the student's state of mind. His simple, student-centered motto says it all: "I want to see you succeed."

In November, Hough joined King Schools as Senior Vice President of Business Development and Sales with an emphasis on further developing King's offerings to colleges, universities, and flight schools. It's a role for which he is perfectly suited, having been Chief Instructor at three different Cessna Pilot. Center flight schools that use King Schools developed syllabi.

Hough's previous professional position, which he occupied for eight years, was with Liberty University School of Aeronautics, where he was not only an adjunct professor and Part 141 chief instructor, but also grew Liberty's roster of affiliated flight schools from one to 88 throughout the country. All rely on King Schools course material as part of their curriculum. He calls himself "an entrepreneurial person," a description borne out by the growth of Liberty's aeronautical student enrollment, which skyrocketed during his tenure from a handful to nearly 4,000.

"We're very fortunate to have Brian join King Schools," said CEO Barry Knuttila. "We've been admirers of his for many years and know that Brian will provide new ideas and capabilities that will benefit our customers in the many years ahead."

Practicing what he preaches, Hough owned a full-motion Redbird FMX simulator, and has owned three airplanes: a Cherokee Six, a Cessna 172RG, and a twin-engine Beech Duchess. In addition to his professional work, he has served as a national council representative, volunteer judge, and chief judge at many regional and National Intercollegiate Flying Association (NIFA) events. He has also served as a state certified fire fighter, rescue specialist, first responder, and medic. At the other end of the activity range, he water skied on a show team for several years, and is a dedicated football fan.

"Brian is a very engaged person," says King Schools Co-chairman John King. "We're very happy to have him join us."

Brian can be reached at bhough@ KingSchools.com. Drop him a hello, and feel free to ask him questions about your flight school or university.



Desert Jet FBO Artist Series Inspires and Engages Travelers to The Coachella Valley

Desert Jet, the premier full-service business aviation company based at the Jacqueline Cochran Regional Airport in Thermal, California, welcomed the vibrant contemporary works of artist Nicholas Kontaxis to its executive FBO (Fixed-Based Operator) facility one year ago. Kontaxis is the second prominent local artist to be featured at the Desert Jet Center FBO as part of the Artist Series Program launched in early 2020 when the newly built cutting-edge facility opened.

The art pieces created by Kontaxis deliver vivid color and texture to the beautifully designed executive terminal, engaging and delighting the many travelers and guests that visit the FBO. Several art pieces adorn the hallways, conference room, and pilot lounge, including the captivating large-scale abstract artwork that stretches across the two walls in the mezzanine high above the luxurious lobby.

Kontaxis is a celebrated self-taught artist. He has built a successful career creating large-scale paintings utilizing heavy body acrylic paints and a battalion of pallet knives. Over the last four years, his work has anchored a slew of sell-out solo exhibitions and record-breaking crowds



at galleries in Los Angeles, Sun Valley, Palm Desert, Chicago, Atlanta, and New York. He has been commissioned by Adidas, Coachella, and the Los Angeles Chargers while attracting collectors such as Roger Federer and Eric Schmidt. His story has been featured throughout the American and London press, including an Emmy-nominated piece from NBC.

Kontaxis made his international debut in London last fall with an overwhelming reception. The renowned gallerist Liam West of West Contemporary said, "Nicholas is not only a young, talented artist but one that has championed seemingly unconquerable physical setbacks. He is contributing something new and exciting, which the London and international art scenes must-see."

The 24-year old's background is also distinct. Kontaxis was diagnosed with an extensive brain tumor at 15 months of age, which resulted in him suffering over 50,000 seizures throughout his life. Montana Butler of Heather James Fine Art observed, "Painting has served as a respite for the artist over the years. Nicholas' story is like that of many other prominent figures throughout art history like Van Gogh. He also had temporal lobe epilepsy." Additionally, Kontaxis has a related form of autism, which is evident in his work through the myriad of repetitious strokes that are the hallmark of his artistic style. Steph Sabbag of De Re Gallery commented, "Nicholas" paintings are some of the most inspiring works I've seen, comparable to artists such as Jasper Johns and Sam Francis."

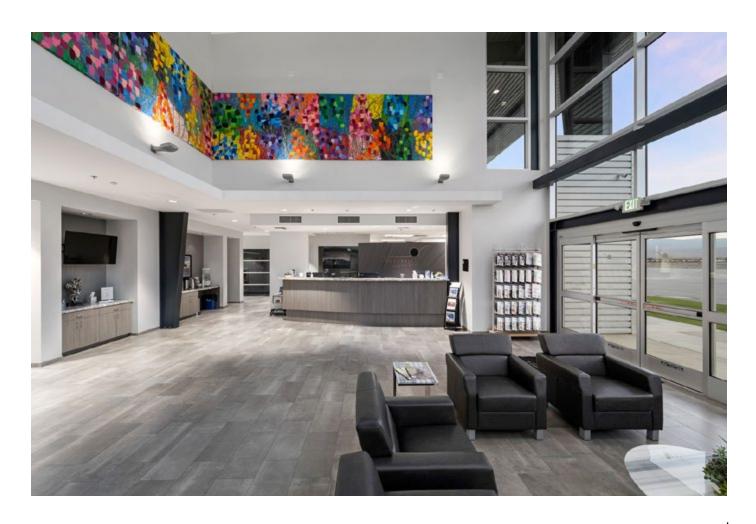


"We are thrilled by the overwhelming response that our Artist Series continues to receive from the guests that visit our FBO to those in the art community in the Coachella Valley," says Desert Jet Chief Marketing Officer Chris Little. "Nicholas is a phenomenally talented young artist. The installation of his bright and colorful art exhibit has been an inspiration to many travelers and guests viewing his paintings and learning about his story."

Desert let Chief Executive Officer lared Fox said, "It has been such a pleasure to have Nicholas' amazing art on display at the Desert Jet Center. We have received tremendous responses from our FBO clients who have

loved the vibrant abstracts showing in our naturally lit FBO, which is a great combination. Nicholas' art and unique story are exactly what we envisioned when we created the Artist Series bringing together great new artists and Desert Jet clients in a gorgeous, state-of-theart FBO."

The Nicholas Kontaxis collection will be on exhibit until December 9, 2021. His large-scale mezzanine painting will remain until 2022. Our next upcoming local artist, renowned in the art community for his distinct style and talent, will be unveiled in mid-December.





Cape Air Names Linda Markham CEO, Effective January 1, 2022

Cape Air Founding CEO Dan Wolf to serve the company as Chairman of the Board of Directors

After 32 years as Cape Air's Founding Chief Executive Officer (CEO), Dan Wolf will step down as CEO on January 1, 2022. Cape Air President Linda Markham will be named CEO, effective January 1, 2022, and will continue to serve as President in her new role. This change in leadership reflects a yearslong succession planning process put in place by the airline's Board of Directors.

"Building this airline from one route and a handful of employees to the company Cape Air is today has been a blessing and privilege for which I am truly humbled," said Dan Wolf. Wolf will remain as Chair of Cape Air's Board of Directors, advising on the company's strategic and long-term initiatives. Wolf continued, "I have worked with Linda for nearly 20 years. She has the heart, intelligence, experience, and energy to lead this company. Linda will embrace this new role, inspiring and leading Cape Air into an exciting future."

Markham will become the only woman CEO of a major or regional airline in the United States, a welcome and celebrated addition for all women in aviation.

"With tremendous gratitude to Dan and Cape Air's Board of Directors for their trust and support, I look forward to assuming my new role and helping Cape Air soar to new heights," said Linda Markham. "I am humbled by the opportunity to lead such an outstanding organization."

Markham joined Cape Air in 2002 and was named Chief Administrative Officer in 2004. She has served as Cape Air's President since 2013, overseeing the airline's daily operations and directing the company's interim and longterm strategic planning. Passionate about advancing opportunities for women in the aviation industry. Markham serves as Board Chair for Women in Aviation International (WAI) and was the first woman to serve as Chair of the Board for the Regional Airline

Association (RAA). She currently serves on RAA's Executive Committee and the Cape Cod Chamber of Commerce.

Dan Wolf founded Cape Air in 1989 with one route between Boston and Provincetown. eight employees and a first-year total of just 8,000 passengers. Today, Cape Air, along with sister airline Nantucket Airlines, is the largest commuter airline in the United States and serves more than half a million passengers a year. In 1996, Cape Air became a partly employee-owned company and now the airline has a workforce of approximately 700 employee-owners.

"Not only have I been able to follow my passion of flying over the past four decades, but I have been able to share that passion in friendship and partnership with remarkable people," said Wolf. "I look forward to supporting the entire Cape Air team in my new role as the company flourishes under Linda's leadership".





WAI Congratulates the 2022 Pioneer Hall of Fame Inductees

Women in Aviation International (WAI) has selected the 2022 inductees for its International Pioneer Hall of Fame. These women will be honored during the 33rd Annual International Women in Aviation Conference, which will be held March 17-19, 2022, in Nashville, Tennessee. The induction ceremony and celebration dinner will take place on Friday, March 19, 2022, from 6-8 p.m. at the Gaylord Opryland Resort & Convention Center.

The 2022 Pioneer Hall of Fame inductees are:

<u>Cornelia Clark Fort</u> earned an instructor rating in March 1941 and became Nashville's first female flight instructor and the only one in Tennessee at that time. She became famous for being part of two aviation-related events. The first occurred while conducting civilian training flight at Pearl Harbor on December 7, 1941, when Cornelia was the first U.S. pilot to encounter the Japanese air fleet during the attack of Pearl Harbor. She and her student narrowly escaped a mid-air collision with the Japanese aircraft. The following year, Cornelia became the second member of what was to become the Women Airforce Service Pilots (WASP). She was stationed at the 6th Ferrying Group base at Long Beach, California, and on March 21, 1943, became the first female pilot in American history to die on active duty. While flying in formation enroute to Love Field in Dallas, Cornelia's

left wing of her BT-13 was struck by the landing gear of flight officer Frank Stamme Jr's airplane. She went into an irreversible dive and crashed 10 miles south of Merkel, Texas. Cornelia was portrayed in the film Tora! Tora! Tora! and the Cornelia Fort Airpark in East Nashville is named after her.



Cornelia Clark Fort



Capt. Rosemary Bryant Mariner, U.S. Navy,

earned her private pilot certificate on her 17th birthday. She was the first woman admitted to the Purdue University Professional Pilot program, and after graduation was selected in the first group of eight women to train as naval aviators in 1973. Rosemary received her Navy wings of gold in June 1974 and became the first military woman to qualify in a tactical jet aircraft, the A-4 Skyhawk, in 1975. The following year, she broke another barrier, becoming the first female naval aviator to fly the A-7E Corsair II. Rosemary continued to add many "firsts" to her accomplishments including the first Navy woman to fly the vintage F-86, the first woman aviator to qualify as a Surface Warfare Officer, and the first military woman to command an operational aviation squadron. She flew over 3,500 flight hours and 17 carrier landings and was awarded the Defense Superior Service Medal among many other awards in her naval career. Rosemary passed away at age 65 and was honored by the Navy with a four F/A-18F aircraft flyover at her funeral in East Tennessee.

Col. Peggy A. Phillips, (retired) of the U.S. Air Force, was the first woman selected by the 702nd Military Airlift Squadron to attend undergraduate pilot training. After graduating in April 1981, UPT Class 81-05, Peggy returned to McGuire Air Force Base, New Jersey, to fly the C-141 Starlifter. She upgraded to Aircraft Commander in minimum time, and then became an instructor pilot, flying global missions. She rose to the position of first female C-17 squadron commander and served more than two years during Operation Iraqi Freedom. After logging over



Capt. Rosemary Bryant



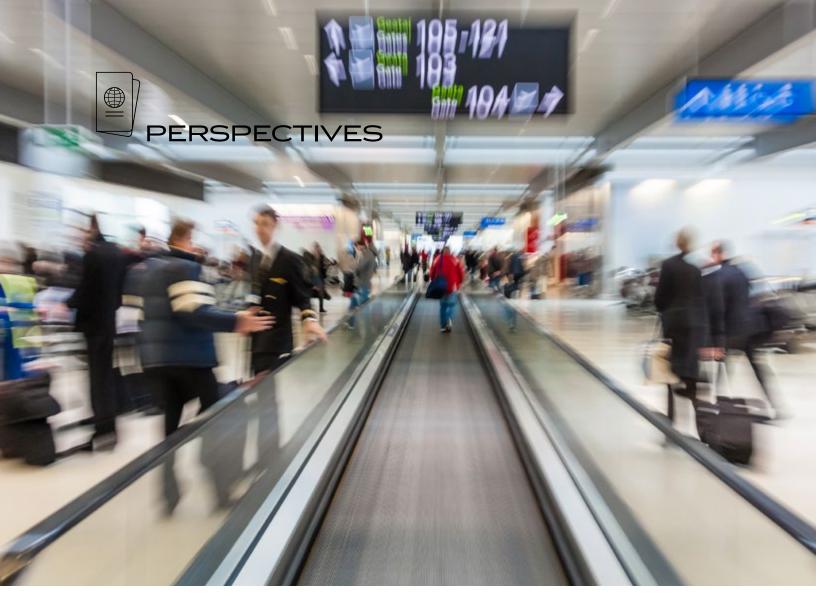


5,200 hours, including 240 combat hours, she was promoted to the rank of Colonel and transferred to the Tactical Airlift Command Center, where she fulfilled the role of senior director of operations for five years. During that tenure, Peggy became the first female reserve pilot to serve as director of mobility forces supporting the Katrina Operation. Serving for 30 years as an Air Force Reserve officer, Peggy retired from military service in 2010. A recipient of numerous service medals, Peggy is also a charter member of Women Military Aviators and a WAI Lifetime member.



"Our 2022 inductees reflect the excellence represented by our members," Allison McKay, WAI CEO says. "Our International Pioneer Hall of Fame celebrates not merely women of great accomplishment, but women who have carried the weight of future female aviators on their shoulders as they broke down gender barriers and proved that women could succeed and contribute to aviation in powerful ways."

The Women in Aviation International Pioneer Hall of Fame was established in 1992 to honor women who have made significant contributions as record setters, pioneers, or innovators. Special consideration is given to individuals or groups who have helped other women be successful in aviation or opened doors of opportunity for other women. Each year, the organization solicits nominations from throughout the aviation industry for the WAI Pioneer Hall of Fame. For more information on the WAI Pioneer Hall of Fame. visit pioneers.



The Cons of Being an Airline Pilot

Consider the downsides to becoming a career pilot with an airline WRITTEN BY: KRISTOPHER OLSON

ast month, this column was titled, The Pros of Being an Airline Pilot. This month, I'll take the opposite position: What are the downsides to this profession?

Working weekends, holidays, late shifts, early mornings and other inconveniences

Airlines operate around the world, around the clock every day of the week. This is no 9-to-5 job. As a pilot new to an airline, one can expect to fly weekends and holidays. Some flights will start early in the morning, others will run until late in the evening. Pilots may fly overnight flights and stay in hotels far from home. For many, this variability is a feature, not a defect of the career. However, it can cause challenges to the body's natural sleep rhythms. Additionally, being on the road with a schedule that isn't fixed can make it hard to have pets or participate in local clubs or community events. If you are a commuter, you become reliant not only on the schedule your seniority holds, but also the on-time performance of your commuting airline, weather and seat availability. Regardless of your employer, you will miss events with friends and family during your career.

Annual checks

Most employers have a formalized checking or employee review process but airlines are unique in that they have governmentmandated reviews. Each airline is slightly different, but you can expect to have an annual competency check that evaluates your procedures and knowledge of aircraft systems. Add to these checking events that take place every time you transition to a new aircraft

or switch from captain to copilot (or copilot to captain) and you will face another review. You can rapidly see how pilots are exposed to many checking events, each with the potential to stain a career.

Additionally, you may have frequent on-thejob evaluations by company check airmen or FAA inspectors. In addition to these proficiency checks, pilots are subject to health screenings every six or twelve months depending on age. Various medications are not allowed for pilots, and some illnesses that seem minor to other professionals can be career ending to pilots. (Total color blindness and sleep apnea are two examples.) For someone who may be the sole income provider for the family, these constant reviews can cause angst.

Seniority can backfire

Your entire career outlook is based on the airline for which you fly and your seniority relative to other pilots. The aircraft you fly, your schedule and whether you are a captain or copilot are all dependent on these two factors. But what if your airline goes bankrupt, downsizes or is acquired by another carrier? In this highly unstable industry, many pilots have been impacted by these events. Sadly, this can be a downside to the seniority system. Promotions, such as upgrading to captain, are not merit-based but are solely senioritybased. This can mean a senior captain at a small airline can be forced into a copilot seat if the airline is acquired by a much larger

carrier. This happened to pilots with AirTran when it merged with Southwest Airlines, and with Reno Air and TWA when they merged with American Airlines. Even worse, when airlines downsize or close outright, all those captains at the defunct airline can expect to start as copilots with their new outfits. Even for those who begin as direct-entry captains at a new airline, their seniority is based on their hire date not their experience. Therefore, for many years, they can expect to be on reserve, working holidays and weekends.

What makes this situation even tougher is that pilots may see their airline is struggling financially, but the seniority they have acheived makes it hard to leave for a new airline where they will just have to start over. Pilots with Pan Am and Eastern Airlines might have seen their airlines were struggling for decades, yet it made little sense to give up decades of seniority to start over at the bottom, with less pay and poor schedules with new airlines like Southwest or America West. At the time, those pilots could hardly believe those titans of the industry would dissolve and that the scrappy upstarts would rapidly grow beyond them. Even if those pilots had predicted this, leaving might still have not made sense. We saw this story replay with the likes of JetBlue and Spirit in the early 2000s. While legacy airlines filed for bankruptcy and struggled to compete, the low-cost-carriers and ultra-low-cost-carriers

enjoyed relatively unimpeded growth. Could this cycle repeat with newcomers AHA!, Avelo, Airbahn and Breeze?

Essentially, as one acquires more and more seniority, it becomes harder to justify leaving a company, even as opportunities outside seem better. While other professionals freely move between corporations, pilots, in a way, can get stuck.

If you are a seasoned professional, what do you think? What are you least favorite aspects of this career field? What do you want to share with newcomers? Aero Crew News would love to learn your perspective. Write to us at info@aerocrewnews.com.



About the Author

Kristopher Olson grew up in an airline family including pilots, mechanics, flight

family including pilots, mechanics, flight attendants and air traffic controllers for major airlines and the Federal Aviation Administration. Read More...



SMART Goals

The First In A Series

WRITTEN BY: ERIC RAY

appy New Year!! Well, now that we have moved from Auld Lang Syne onto new resolutions and promises of new ways to keep those resolutions, I must ask, how did the last set of resolutions turn out? Over the previous year, I mentioned numerous techniques and planted ideas for getting you into shape, lose those pandemic pounds or how to prioritize fitness needs while you were on the go. This year, we are going to take a different approach and present an ongoing series of setting goals and how to move from making resolutions into setting goals that work for YOU.

When it comes to setting goals, there are numerous other acronyms that you have probably read or heard about, but I prefer the SMART goal technique. Each month we will briefly address each letter and how to incorporate those techniques into your plan so you can achieve the best version of you or achieve what we call your #PAARLife (Purposeful Action Achieves Results!!) The one thing I have noticed about making resolutions, and why in my opinion we fail at keeping them, is because they are just vows with no real meaning. While it is easy to say, "I resolve to lose ten pounds or stop eating so many cookies." (Yes, I still struggle with the sweet side of life and all the chocolatey goodness that is homemade chocolate cookies!!) But, it's something else altogether to focus energy on a goal to achieve a very specific result.

Specific

The first letter in the SMART acronym signifies that any goal you set must be very Specific. Within the context of specificity answer, the following questions:

What do I want or hope to accomplish with this goal?

Why is it important to me?

Who is or can be involved with this process to help me achieve my desired outcome?

Remember, within your life, you are not an island. Reach out to the people around you and ask for pointers, mentorship or guidance to help you on your journey.

Of course, I can't leave you without an idea to help you start your goal-setting process.

You haven't changed because you aren't uncomfortable

It's very easy to settle in and just go with the flow. The status quo keeps the stress levels low because it's far easier to stay comfortable. I can still relate to this: I was in a rut and nearly 30 pounds heavier than I am now. It wasn't until I was uncomfortable in my own pants that I took a hard look in the mirror and knew I had to fundamentally change. How do vou think diamonds are created? Pressure!! Get uncomfortable.

Let's start this New Year off the right way and make lasting change. Come back each month for the goal setting series and if you need additional help reach out!

CoachEric@hii360coaching.com





Eric Ray is a certified personal trainer and nutrition coach. He is the co-creator of the Hii360 Coaching Method and current president of Hii360 Coaching. Read More...



Start Today, Not Tomorrow

WRITTEN RV. REINI THIISSEN

appy 2022 – the New Year in which all of our plans will come true! Or not? As it turns out, we are overly optimistic about the future and falsely believe that there is more time available tomorrow than there is today. However, the truth is that there is no ideal moment for those challenging tasks and those exciting new plans. Studies have shown that procrastination is a common and universal phenomenon. Many of us do it, often with stress symptoms as a result. But why do we decide to ignore those chores on the to-do list? This article explains why you procrastinate and how to stop.

The belief that good things will happen in the future is good for our overall well-being and health, increasing our self-confidence, motivation, and resilience. However, there is also a downside, for example, when it comes to bad habits. In this instance, "later" becomes a perfect excuse to put off difficult decisions and changes. Interestingly enough, we often view others as weak when they do not "just do it," even though we are convinced that everything will be fine when it comes to ourselves. This is because we judge others on actual behavior and achievements, whereas we focus and believe in our good intentions, even if they are not yet realized.

Later is Easier

This optimistic perspective of our potential makes it seem like complex changes will be less of a burden later. Breaking up an unhappy relationship, quitting unhealthy habits or other inconveniences come with unpleasant feelings which prevent us from making the change today; we feel as if these feelings will be easier to deal with later. However, this is an unrealistic view: we will still be the same person with similar challenges and emotions. Time is something we feel there will be more of later on, which is antithetical considering that with the passage of each day there is less time left for the rest of your life.

How to recognize procrastination

These are some of the most common excuses that we all have most certainly used in our lives.

- Now is not a good time.
- · I am not ready yet.

- I can stop if I want to.
- I am not as addicted as others, so I do not really need to stop.
 - I have to be prepared first.
- Later, I will stop drinking, overspending, smoking, the unhealthy relationship, working too hard, working too much, ad infinitum.
- I will have more time later, more money and more space.
- Once I finish the small chores, I will be able to focus on the big tasks.
- During the holidays, I want to eat well, so after the holidays is better.
- I will start after Christmas, vacation, in the New Year. . .

The concept that "later will be a better time" helps protect our self-image as sensible, reasonable, autonomous people. By procrastinating, we avoid having to deal with the challenges that come with the change. However, the result is counterproductive; the message that you should have improved/changed/made that decision continues to nag in the back of your mind. Additionally, the longer you wait, the more difficult it gets to take the step.

Procrastination leads to cancellation

Here are some tips to motivate yourself to do things today:

• To determine a direction, it might help to think about where you want to be in five years. What kind of person do you want to be? What are your ideals? What do you want to have achieved? As much as possible, convert this into concrete action points and try to stick to them, even if it is not convenient. Would you do it "later"? If yes, do it now!

- Observe and reflect on your own behavior as would perceive other people's actions. Pretend to be an outsider and consider what you are concretely doing, not the intentions, plans, desires, and motives behind it. This approach will make your selfimage more honest and realistic.
- Are you convinced there will be more time for an activity or change in the future? Imagine that it is not "later," but now. Would you have time for it if it had to be done now? If not, you probably would not in a few months from now either.
- If you have to deny something enjoyable in the present, try to envision the positive effects in the future as concretely as possible. Envision the result of ending that addiction, the unhappy relationship or seeing the impact of the hard work. Ask yourself what that result looks like and focus on all the details of that moment.
- Conversely, reflect more globally on the here-and-now. For example, instead of, "Oh, that one extra (drink/snack/hour on the couch)," think, "How much will I have in a week if I do this every day?"
- Try to view your future self through the lens of someone you care about and who has your best interests at heart. When feeling afraid of something, ask yourself, "What will it be like in a month or two years if I postpone? How will I feel then? Is there anything I can do now to make it easier?
- Keep the long-term goal in mind. When struggling with temptation, translate the behavior into terms of serving a more profound plan. When exercising, appreciate the moment and actively think, "My body

is hard at work; I am working on my health to____ (insert your goal here, for example, stay fit to play soccer with my children)."

Final Note

If you experience tension and discomfort as a result of stopping drinking, smoking, Facebooking, or another addiction, then think, "The worse I feel, the clearer it is that this was necessary and good for me." Finally, think of the liberation you are working toward. And tasks require effort. Remember to think, "When I accomplish this, I will have improved my self-discipline, autonomy, perseverance, self-control, etc. The more I do this, the stronger I become." And finally, if you are planning to make New Year's Resolutions, review the WOOP method as described in How To Make Your New Year's Resolutions Last.



About the Author

Reini Thijssen is a Mental Health Counselor and avid traveler. She moved to the United States from the Netherlands in 2019 to pursue a career in counseling. She is a writer for Aero Crew News and specializes in helping aerospace professionals. Read More...



Check HOT before Takeoff

Understand de-icing and anti-icing products and procedures with their holdover time implications oldover time (HOT) helps pilots determine the temporal effectiveness of the deicing procedure across a wide range of temperatures and precipitation intensities. Often, colder temperatures with intense precipitation (especially rain or freezing rain) reduce the overall time available for a pilot to initiate takeoff after the deicing procedure is completed. A decision to continue takeoff after the recommended HOT period has elapsed may be unsafe and irresponsible.

The science behind deicing fluids

De-icing and anti-icing fluids are essentially freezing point depressants. Glycol when mixed with water at various concentrations in order to obtain a suitable de-icing/anti-icing fluid reduces the freezing point of water and thus encourages the melting of solid precipitation (e.g., frost, ice, snow, etc.) from the aircraft surfaces. Corrosion inhibitors, wetting agents, and a dye are also added to these fluids to protect the aircraft surface, prevent the fluid from running off the aircraft surface and to visually identify the type of de-icing fluid. The type and application of de-icing fluids used on an aircraft should carefully follow the manufacturer's recommendations and procedures to prevent any unintentional aerodynamic impact or degradation of the aircraft structure.

Types of deicing fluids

• **Type I fluid** is dyed red or orange and may be applied on any aircraft. Any contamination will blow-off the aircraft surface even during low-speed (approximately 60 kts) takeoff. Type I fluid is characterized by low HOT.

- For Type II and Type IV fluids, thickening agents are added to increase viscosity. Therefore, the tendency for the fluid to run off the aircraft surface is reduced and thus provides added protection. However, higher rotation speeds are required to blow the fluid from the aircraft. These fluids are typically clear and dyed green, respectively.
- Type III fluid is dyed yellow and is characterized by properties between Type I and Type II/IV. The HOT is longer when compared to Type I, but the fluid is designed to shear off the aircraft surfaced at a lower rotation speed (less then 100 kts).

FLUID (ALL SAE)	FLUID COLOR	SAMPLE HOT FOR SNOW (HR:MIN)	MINIMUM ROTATION SPEED
TYPE I	RED- ORANGE	0:06 - 0:11	NO MINIMUM
TYPE II	CLEAR OR STRAW	0:20 - 0:45	100 KNOTS
TYPE III	YELLOW- GREEN	0:10 - 0:20	60 KNOTS
TYPE IV	EMERALD GREEN	0:35 - 1:15	100 KNOTS
TIMES NOTED ARE IN HR:MIN FORMAT			

This HOT chart is for illustration purposes only and is not to be used in determining holdover times. Always refer to specific guidelines provided by the manufacturer of the deicing/anti-icing fluid used.



Pilots should thoroughly inspect the flight control surfaces during pre-flight inspection if the aircraft has been de-iced. Type II and IV fluids have a tendency to rehydrate to a jelly-like consistency and freeze at colder temperatures between the gaps of the flight control surfaces. This phenomenon has been associated with locking of the flight control surfaces (including ailerons and elevators) and has resulted in many flight crews declaring an emergency and performing a precautionary landing.

Complacency kills! Disregarding HOT, improper de-icing procedures, and hasty preflight inspections have resulted in numerous incidents and fatal accidents. Flight crews should exercise caution when operating in known icing conditions and err on the side

of safety. Having an aircraft towed out of a heated hanger only minutes prior to takeoff, delaying departure to allow the weather to pass (especially mixed precipitation, freezing rain or freezing drizzle), or turning around for a second application of di-icing fluid when approaching the HOT limits could ultimately save your life and those of your passengers.



About the Author

Ajay Raghavendra earned his Ph.D. in Atmospheric Science from the University at Albany (SUNY), N.Y. in September 2020) He is a graduate with honors of Embry-Riddle Aeronautical University with a B.S. in Meteorology and in Computational Mathematics (May 2016). Read More...



Chasing the Northern Lights

WRITTEN BY: LIA OCAMPO

hat are these Northern Lights, aka Aurora Borealis, that the quest to see them is an item on many travelers' bucket lists?

According to Roman mythology, Aurora is the Goddess of the Dawn, and Boreas is the God of the North Wind. Science explains that the lights are caused by a stream of charged particles escaping the sun and colliding with our planet's magnetic field and atmosphere."1 In simple language, the sun emits tiny particles/electrons into space that reach the Earth and are attracted by gravity (at the poles) and mix with gases in the Earth's atmosphere, which makes them glow. (The Southern Lights, or Aurora Australis is the southern hemisphere's equivalent.) This natural phenomenon can be seen when it's dark and the night is clear. The majority of Aurora displays are predominantly green because the color of Aurora depends on the intensity of solar activity. Yellow, pink, blue, and red tend to appear when the solar activity is high. The phenomenon can be active throughout the day but we can't see it except in darkness.





In Alaska, Fairbanks is among the best places to see the Aurora Borealis. The Aurora Oval, a ring-shaped zone over the far north where aurora activity is concentrated is often aligned with Fairbanks. The best time to see the Northern Lights in Alaska is August through April.

In the U.S., you may also see the Aurora Borealis in the northern parts of Maine, Michigan, Minnesota, and Idaho. Other countries from which to view the Aurora are in the northern parts of Norway, Finland, Sweden, Canada, Iceland, Greenland, and Scotland.

In October, a trip with my children to Fairbanks was a success. Our goal was to see the Northern Lights and we were lucky to have Aurora sightings for two consecutive nights. We arrived at the right time after there had been a solar storm on October 11. Remarkably, the light was visible as far south as New York.



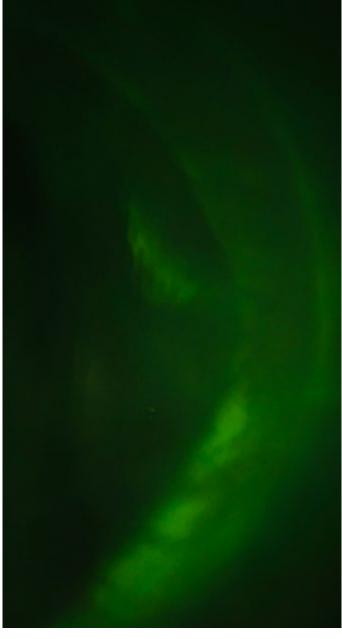
somewhere and had a glimpse of the Lights from your window seat?

There are many myths associated with the Northern Lights. My favorite is from the Japanese culture. They believe that "a child conceived during the Northern Lights display will be blessed with good looks, intellect and good fortune." 2 For me, seeing this enchanting light show was a fortunate experience.

Chasing the Northern Lights to see the celestial show as a swirling array of green behind the shimmering stars, despite our freezing toes and hands, was a surreal experience.

Fairbanks is not only a "sweet spot" to view Aurora, but you can spend the day enjoying outdoor activities while waiting for that big night. Experience dog sledding, snowmobiling, a glacier cruise, ice fishing, wildlife viewing, soak in Chena Hot Springs, visit the Ice Museum and Denali National Park. Driving to Denali, the highest peak in North America, was my favorite.

Northern Lights have been observed since ancient times and can even be seen beyond the Earth. Astronomers have observed Aurorae on other planets with a sufficiently dense atmosphere to produce the light effect. When the effect is occurring on Earth, it can be view from the International Space Station. Have you been lucky enough to see the Northern Lights from the cockpit? Were you traveling





To best experience the Northern Lights, here are a few things to remember:

- 1. Plan for the right time of the year.
- 2. Check the Northern Lights forecast and the local weather.
- 3. Use a camera with a wide-angle range, manual focus, remote shutter, and enough battery capacity.
- 4. If you don't have a professional camera and prefer to use your mobile camera, download Northern Lights Pphoto Taker. It will help you take better photos.
- 5. Use a tripod or set your camera on something steady.
- 6. Dress warmly and bundle up.
- 7. Plan to stay for a few days to increase your chances of seeing the lights.

- 8. If you are not joining a tour, you must drive to a vantage point with no light pollution.
- 9. Be patient. Northern Lights can be elusive.
- 10. Enjoy the moment.

The Northern Lights are listed among the Seven Natural Wonders of the World, Check off Northern Lights viewing on your bucket list. Be mesmerized with this mother-nature light show. Indeed, it is an awe-inspiring experience and a story that will last you a lifetime.

Fourteenth century explorer Ibn Battuta once said, "Traveling – it leaves you speechless, then turns you into a storyteller."

Check out my Northern Lights experience for inspiration: https://www.youtube.com/ watch?v=wu6ygeKo0Zg

- 1. Description from the BBC: https://www.bbc. com/news/science-environment-26381685
- 2. https://www.theaurorazone.com/about-theaurora/aurora-legends



About the Author

Lia Ocampo is a passionate flight attendant and author. Her flying experiences give her the opportunity to meet amazing people and create wonderful memories. Read More...



Aircraft Performance and Density Altitude: A Critical Correlation to Flight Safety

WRITTEN BY: SERGIO SOVERO

t is unquestionable that the effects of density altitude could be significantly detrimental to flight safety. Following a linear correlation, an increase in density altitude leads to degraded performance. Among the many factors capable of causing loss of aircraft control and controlled flights into terrain (CFIT), density altitude is one of the most insidious, subtle and commonly overlooked elements.

Density altitude is defined as pressure altitude corrected for non-standard temperature. The dynamics of atmosphere result in fluctuations, either warmer or colder than standard, and therefor leading to instability of density altitude. As a rule of thumb, high density altitude equals poor performance. The principle can be evidenced by referencing an aircraft flight

manual (AFM) or POH (pilot operating handbook). As an example, higher density altitudes always result in longer takeoff distances, as well as degraded climb rates. When departing an area of elevated terrain, the threat is maximized. The higher the altitude, the less dense the air will be. Naturally aspirated engines will not be capable of producing the same horsepower as at sea level, thus reducing the rate of climb. The importance of conducting a detailed preflight consisting of a careful evaluation of performance charts cannot be overstated. Always ensure utilizing the most appropriate chart (for a given weight, temperature and elevation) to apply all performance corrections before finalizing the calculations. The chart referenced must be specific to your aircraft make and model, not generic because each AFM is unique not only to the make and model but to the specific equipment installed on that unit.

Landing performance may also be diminished. A hot, humid day, may result in a density altitude much higher than the actual airport elevation. Combining this with a higher true airspeed and stopping may become impossible. Even before takeoff, pilots must compare actual landing distance to the runway distance available utilizing the most recent temperature data. Consider adding personal-safety margins as well, if you are operating an unfamiliar aircraft, flying from or into an unfamiliar airport or if your proficiency is degraded by a lack of recent flying.

When operating under IFR, specific departure procedures will specify the required

climb gradient to remain clear of obstacles and terrain. It is possible your aircraft may be able to comply with those restrictions at lower density altitudes, but not under all other circumstances. These procedures are not able to guarantee a safe flight path if the required climb performance specified is not met. In order to prevent a controlled flight into terrain event (CFIT), a methodical and conservative approach is critical. Be aware of the aircraft's capabilities, but most importantly, do not exceed the operating envelope or operate close to its maximum limits.

Sophisticated ground-proximity systems and terrain displays are rendered useless if an aircraft is not capable of avoiding terrain due to insufficient performance. As mere tools to enhance situational awareness, they do not replace a diligent preflight. Each flight deserves a careful examination of all environmental factors, including density altitude. Even if it appears to be insignificant on a given day, build the habit of calculating its effects on takeoff, climb, and landing performance prior to every flight. Do not allow a routine takeoff or landing to become an accident. As always, prevention starts with knowledge and discipline, including establishing personal minimums and detailed preflight inspections.



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Starting the Year Off Right

A Plan to Achieve Your 2022 Career Goals

as we begin a new year and look toward the future, it is a great time to focus efforts on career goals and dedicate ourselves to professional growth and career development. While our industry continues to experience uncertainty and volatility due to the continuing global pandemic, the long-term hiring projections remain strong. As the industry grows, movement can be seen through all its sectors. Significant airline hiring creates job opportunities at major airlines, regional airlines, corporate flight departments, and flight schools. No matter what phase of your career you are in, take advantage of this opportunity to focus your energy on getting where you want to be in 2022.

Let's take a break from discussing aviation applications to instead talk about setting professional goals for the year ahead. We set goals in both our personal and professional lives. While setting goals is an important first step, I believe it is just as important to create a plan of action through which those goals will come to fruition. Aiming to work for a specific

company or earn a promotion into a certain job title is a great start, but without a plan to follow, you may find yourself unsure of how to proceed.

Creating a plan to achieve your professional goals in 2022 is an exercise, and like most exercises, you will get out of it what you put into it. Breaking a goal down into smaller, more specific steps will both make it seem more achievable and provide a visual representation of what you believe will be required to increase your odds of success.

Let's say your goal is to accept a job offer with a certain airline. Thinking about that goal on its own can be very intimidating! The aviation industry is known to be competitive, and as most will tell you, job offers are not just doled out to anyone. The process to secure a position with an airline involves much more than simply filling out an application. However, taking the time to break down the task allows you to take a targeted approach as you pursue your goal.

What sort of things can be part of the plan for 2022? Perhaps you want to attend a job fair where representatives from airlines will be present. This will allow you to speak to recruiters and receive immediate feedback regarding your qualifications. Not to mention, getting your face and résumé in front of airline recruiters is never a bad idea. Part of your plan for this year could therefore involve researching job fairs and booking your attendance. Or maybe you wish to become more involved at your current company. For pilots, there are numerous opportunities that exist outside of the flight deck. Your plan of action for the year could involve following

internal job postings and learning about roles that come up in the Chief Pilot Offices, Flight Operations, training department, or recruitment. You may even consider reaching out to those who currently work in those roles to indicate your interest. If you are currently in flight training or building your hours, a plan of action for the year might include researching companies you may wish to fly for and preparing for the application and interview process. I have seen many people wait until they receive an interview date before beginning the preparation process, only to find themselves incredibly stressed as they attempt to prepare in a short period of time. If you create a plan of action for the year, and treat it as you would a to-do list, you can help ensure you remain prepared for the next step in vour career.

I understand that none of this advice is ground-breaking, but I truly believe that there are great benefits to mapping out your plans for achieving a goal. Approaching your goals using this targeted approach will make them seem more achievable and provide you with a more defined path to follow. Using the hiring projections as some extra motivation, go out and make 2022 a great year for your career!



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Justin Abrams is a first officer for a major US airline. He earned a Bachelor of Science degree in Aviation with a minor in Security and Intelligence from the Ohio State University in 2015. Read More...



Chart It All

A business grown from a young age

WRITTEN BY: JUSTIN ABRAMS

Then I spoke with Trevor Simoneau to learn about his story, the old saying, "Where there's a will, there's a way" came to mind almost immediately. Growing up outside Orlando, Florida, Trevor routinely watched space shuttle launches from the Kennedy Space Center, which sparked his interest in aviation. The more he learned, the greater his fascination with NASA and astronauts became. The opportunities for exploration and adventure spoke to him, and he dreamed of working in manned space flight. When he learned that most of his astronaut idols had roots in general aviation, he saw no choice but to explore it for himself. For a tenth birthday present, his parents gifted him an introductory Young Eagle flight, hosted by the Experimental Aircraft Association, and he loved it. After becoming more familiar with the general aviation world, and wishing to pursue flight training himself, his next challenge was one with which many of us are familiar; finding a way to fund his flight-training goals. Trevor's answer to that task was to start his own business.



Trevor and Pat Anderson of ERAU

Born from a passion for aviation and initially as a resource to further Trevor's flight education, Chart It All began as a new idea to sell products on which aeronautical charts had been printed. Despite his young age, he jumped headfirst into his idea and reached out to family friends with small business knowledge to learn about basic business structure and to develop a plan for starting and growing the company. With their mentorship and his parents' support, he began selling the first product, custom aeronautical chart shirts.

With each sale, Trevor's tenacity increased, and he found himself able to expand and add to the product list. After several years, Trevor landed a deal with Sporty's Pilot Shop. This was an incredible step forward for Chart It All, as it allowed the products to have a significantly wider reach. Fast forward to today, the company now produces and sells all types of customizable chart apparel and gifts. Using the slogan "Chart it. Fly it. Wear it!", the company allows anyone to personalize items such as shirts, pants, sweatshirts, ties, and ceramic mugs with any portion of a sectional navigation chart or instrument

navigation chart. Chart It All exhibits at AirVenture each year in Oshkosh, Wisc. and has collaborated with the Aircraft Owners and Pilots Association (AOPA) and Women in Aviation (WAI) on various projects.

As anyone can imagine, the road to building his successful company was not always smooth. Creating and running Chart It All continues to be full of many challenges, both expected and unexpected. Trevor exudes optimism when he discusses his company and is keen to talk about things which many business owners may not be. He believes that most of the learning has come from the experience of making mistakes. Their first Christmas season on the Sporty's Pilot Shop website was incredibly busy and challenging, as until that point, the company had not experienced such high volume of orders. Throughout the years, he has encountered supply-chain issues, been forced to make tough decisions regarding the company's



Trevor Simoneau

future direction, and most recently face challenges created by the COVID-19 pandemic. These growing pains did not diminish Trevor's spirit. On the contrary, he learned to embrace the challenges and use them to learn how to more efficiently run his company. To provide the best service to his customers, he worked to ensure that he could expand the product line without sacrificing quality or increasing the delivery timeline.

Soon after the COVID-19 pandemic began in early 2020, Trevor began receiving request after request for face-mask products. In order to both satisfy his customers' requests and help frontline workers, Chart It All developed a new face mask product and promised to donate one mask for each mask sold. They first focused on their local area in Florida, but as mask sales continued, they were able to expand their donations throughout the country. All told, within just a few months, Chart It All donated \$45,000 worth of masks to first responders, police officers, hospital employees, and fire fighters.

Trevor is currently a junior at Embry Riddle Aeronautical University in Daytona Beach, Fla. As he became exposed to more industry professionals and learned the true scope of aviation, he developed a great interest in aviation law and policy. He has chosen to pursue a career path in that arena, as he is intrigued by the process through which aviation technology is safely tested and legally approved. Though he no longer aspires to fly professionally, he remains heavily involved in general aviation and plans to become a certificated flight instructor. His shift in professional goals comes as our industry approaches rapidly changing technology and overall systemic changes. He is studying to receive his bachelor's degree in aeronautics and plans to enroll in graduate school to earn a Master of Science degree in Aviation with specializations in Aviation Safety and Unmanned Aircraft Systems. Following completion of these degrees he plans to attend law school. Trevor wishes to impact aviation policy and law to make meaningful changes such as in the development of advanced and urban air mobility (AAM/ UAM), drone deliveries and electric aircraft. The complex legal challenges that surround developing technologies call for professionals who understand the industry to safely help the implementation process, and Trevor plans on being one of those professionals. While



at Embry-Riddle, he has involved himself in research opportunities, ones that will undoubtedly impact future technological developments in our industry. One research project he has been pursuing involves the certification of pilots to fly electric aircraft. As this is an entirely new category of propulsion systems, a new set of training and certification qualifications must be developed and implemented. This is exactly that type of industry problem solving that Trevor hopes to pursue in his career.

Trevor hopes that his path in aviation will show others just how many opportunities exist in the industry. Specifically, he hopes

to reach those who may be interested in aviation, but do not quite know how to become involved. When he first discovered this interest, he was a bit unsure how to move forward. Aviation can be tough to break into and the path to many aviation careers is not always clear. He had no association with aviation through friends or family so he recognizes how difficult it can be to pursue this passion without guidance. He hopes that his successes in business and education will inspire those with a similar passion and show them that there are plenty of opportunities for success.





Since its inception back in 2015, Chart It All has more than served its initial purpose. Looking forward, Trevor plans to expand the company's impact on aviation students. He hopes to fund scholarships for students who, like him, have a passion for aviation but may not have the resources or understanding how to pursue that goal. He hopes the scholarships will also open young minds to all the opportunities within aviation. He believes that, in addition to becoming a professional pilot, greater awareness needs to be brought to other aviation career paths in demand, such as air traffic control and aviation management positions. Though Chart It All was initially formed with the sole intention of funding his flight training, running and

growing the business has provided Trevor with experiences and knowledge that he will carry with him into his career. He has found great success following his passion and wishes the same for all future aviation professionals.

Editor's Note: To see the line of products from Chart It All, visit their website: https://www.chartitall.com.



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