

EMBRAER MAGAZINE VOL 21 → 2023

Arctic Allure

A thrilling wilderness pursuit in the pristine Finnish Lapland

Experience Excellence

Discover the ultimate flying experience with the Phenom 100EX

Visions of the Future

The future of our cities with Ecological Economist Marc Buckley





EXPERIENCE EXCELLENCE





4 PERSPECTIVE

6 NEWS

76 DIGITAL GUIDE

78 WING TO WHEEL

80 MOMENTS

82 VALUES

84 FLEET

86 GLOBAL PRESENCE

88 SALES TEAM

COVER

Luxury Action invites guests to explore the vast Finnish Lapland, where small groups and families can retreat together at Octola Private Wilderness. From November to April, adventurous guests can traverse pristine snowscapes on a husky-pulled sled, before gathering in a traditional Lappish "kota" around a warm fire. Read more on page 70. Photo ©Octola Private Wilderness

B LEADING EDGE

Onward And Upward
Developing the Urban Air Mobility
(UAM) ecosystem for the future

10 UNCHARTED Big Sky Country

The gateway to Yellowstone National Park and the great American West

16 BREAKTHROUGH

Experience Excellence
Unveiling Embraer's all-new

Phenom 100EX

18 ESCAPE

An Aegean Jewel

Exploring historic Halkidiki by land and water at Sani Resort

22 EXPEDITIONS

Travel Gems

Top-tier destinations and purposeful experiences for 2024 and beyond

24 TRAVEL FOR GOOD

High Impact Safari

African Bush Camps' Impact Safari through Southern Africa 30 CUSTOMER PROFILE

A Family Passion For Flight

OnLogic's father-son duo piloting Embraer's Phenom 300E

34 SUSTAINABILITY

Seaweed Savior

A sustainable solution for a world of a industrial challenges

38 INNOVATION

Visions Of The Future

An exclusive interview with Ecological Economist, Marc Buckley

44 WORKFORCE

Straight Down The Line

Embraer's Keith Alvares on his career as a Manufacturing Engineer Supervisor

46 PHOTOGRAPHY

Monochromatic

A fine art series by Photographer Nina Papiorek

52 DESIGN

The Rise Of Floating Cities

Innovative on-water projects designed to respond to changing climates

56 SPOTLIGHT

From Work To Rest In A Pinch

Showcasing Embraer's industry-leading Praetor 500 and Praetor 600

58 PHILANTHROPY

Art For The Youth

Developing the next generation of artists at ANI Private Resorts

MAKING A DIFFERENCE

Tools Of The Trade

Creating opportunities in aerospace through Embraer's Educational Partnership Program (EPP)

EPICUREAN

Culinary Genius

Collaborative culinary pop-ups enticing jet-setting diners with world-class chefs

70 PURSUIT

Arctic Allure

A thrilling Lapland experience at Octola Private Wilderness



Dear Friends,

As we wrap up 2023, I reflect on all the special moments that reinforce our promise to deliver the ultimate experience in business aviation. We began the year with many discussions about the future of the industry. Some about the demand for private aviation and its continued strong momentum. Others on how Embraer will continue to deliver value to the market. And, most critically, on how will we innovate to reach Fly Net-Zero by 2050. We faced these important matters head on with actions that ricocheted throughout the industry.

Early this year, we started by announcing the Phenom 300MED had received FAA and EASA certification, a testament to our reputation for engineering excellence and commitment to delivering even more value through our existing industry-leading products. The following month, our Phenom 300 series once again became the best-selling light jet in the world, now for 11 consecutive years and the most flown business jet in the U.S. This was quickly followed by the expansion of CAE's Phenom 300E training capabilities in Las Vegas, reaffirming the aircraft's unstoppable demand and expanding global fleet. In May, heading into EBACE, we rocked the industry with a massive deal, valued in excess of USD 5 billion, with NetJets to add up to 250 Praetor 500 to their fleet, which already includes over 100 Phenom 300 series aircraft, reinforcing Embraer's portfolio as the most desired jets for the biggest players in fleet and fractional.

Prior to NBAA-BACE in October, we released a series of announcements, demonstrating just how active Embraer had been in the second half of the year. Firstly, we launched the all-new Phenom 100EX, a jet that promises "excellence" with every flight (read more about this experience on page 16). Following the launch, we announced autothrottle to the Phenom 300E, making the most single-pilot-friendly light jet even easier and safer to operate. Then, we announced more growth in flight training opportunities, with doubled capacity at CAE's London Burgess Hill and Las Vegas facilities through new Phenom 300 full-flight simulators.

To learn more about each recent news, see page 6. Lastly, we rounded out the year with crucial progress towards achieving carbon-neutral operations. We were proud to announce the completion of test flights on 100% Sustainable Aviation Fuel (SAF) on our Phenom 300E and Praetor 600, bringing us one step closer to a day when our portfolio can run on 100% clean energy. We've also made efforts to reduce the environmental impact of our own flight operations, including a 10% reduction of emissions, earning Embraer NBAA's Sustainable Flight Department Accreditation during October's event.

This year is ending on another high note for Embraer, with continued sales growth and strong backlog across our product portfolio. Enduring momentum in developing innovations that will improve our products and services support our ability to deliver value to our customers and stakeholders, and progress in shaping a more sustainable future for business aviation. As we celebrate these achievements heading into the holiday season, we want to thank the talented team behind our industry-leading portfolio and our loyal customers who proudly fly with us on more and more exciting journeys.

Soaring Responsibility,

Michael Amalfitano President & CEO, Embraer Executive Jets



IN CASE YOU MISSED IT

The latest Embraer news from around the globe to keep you soaring to new heights



EXPERIENCE EXCELLENCE WITH ALL-NEW PHENOM 100EX

Unveiled in Las Vegas at NBAA-BACE 2023, the Phenom 100EX is the latest evolution from the Phenom 100 series, which has served its loyal customers since 2008 with over 400 aircraft in operation. After years of continued improvements based on customer feedback, the Phenom 100EX delivers superior cabin comfort, operational versatility, and safety-enhanced pilot-centric avionics to offer the ultimate flying experience.

"We are proud to announce the Phenom 100EX—an aircraft designed to experience excellence with

superior comfort and disruptive technology that enhances safety," said Michael Amalfitano, President and CEO of Embraer Executive Jets. "This product reimagines the entry-level flight experience, offering enhanced comfort, empowering pilots, and enriching journeys to deliver more value to our customers."

To learn more about the aircraft, read the article on page 16.

NEW AUTOTHROTTLE FEATURE FOR PHENOM 300E



In late 2024, a new autothrottle feature will be available for the Phenom 300E aircraft to enhance its operational capabilities. With this newest feature, pilots can enjoy a more automated and intuitive flying experience through the autothrottle's advanced automation technology, which will assist in throttle control during various phases of flight.

"We are excited to introduce autothrottle to the Phenom 300E's avionics suite. It is another example of Embraer's mindset of continued improvement, listening to customer feedback, and elevating an industry-leading product even further. Innovations like this enhance the experience and deliver even more value to operators," said Michael Amalfitano, President & CEO of Embraer Executive Jets.

The feature will be available as an optional item for new Phenom 300E aircraft in the third quarter of 2024 and via a service bulletin (SB) available from the fourth quarter of 2024 for aircraft that have received factory-incorporated provisions from January 2023 and on.

PILOT TRAINING CAPACITY DOUBLES FOR PHENOM 300 IN LAS VEGAS AND LONDON BURGESS HILL

To meet the growing demand for pilot training in Europe and the United States, Embraer and CAE announced that their joint venture, Embraer-CAE Training Services (ECTS), will add training capacity with the deployment of two new Phenom 300 full-flight simulators (FFS).

"The two new simulators will double our Phenom 300 training capacity in Las Vegas and London and allow ECTS to train more pilots at a critical time. Over the next 10 years, CAE forecasts a need for 32,000 business aviation

pilots, and we are working with our partners at Embraer to ensure Phenom 300 customers have the highly qualified pilots they need to keep them flying," said Alexandre Prevost, CAE's Division President, Business Aviation and Helicopter Training.

The first new FFS is scheduled to enter service in Q1 2024 at CAE London Burgess Hill (U.K.) and the second in Q3 2024 at CAE Las Vegas (U.S.).

FLIGHT TESTS COMPLETED WITH 100% SUSTAINABLE AVIATION FUEL (SAF)



Sustainability is at the core of Embraer's business strategy and in Q4 of 2023, the company announced it had successfully tested the Phenom 300E and Praetor 600 on 100% neat Sustainable Aviation Fuel (SAF). The tests were performed at Embraer's Melbourne facility and provided significant insight into systems' performance when utilizing fuel that has a composition of 100% SAF on Pratt & Whitney and Honeywell engines.

SAF is a renewable energy source that can reduce greenhouse gas emissions by up to 80% compared to traditional jet fuel, making it a crucial part of Embraer's targets of reaching carbon-neutral operations by 2040 and supporting the aerospace sector to achieve the Net-Zero emissions target by 2050. Continuously exploring new ways to reduce its environmental impact, Embraer will continue working towards a more sustainable future for the aviation industry through research and development efforts in low- and zero-emission alternative propulsion systems, such as electrification, hybrid-electric and hydrogen.

EMBRAER RECEIVES NBAA SUSTAINABLE FLIGHT DEPARTMENT ACCREDITATION

During the company's press conference at NBAA-BACE this October, Michael Amalfitano, President and CEO of Embraer Executive Jets, announced that Embraer's Flight Operations Department was the recipient of the National Business Aviation Association's (NBAA) Sustainable Flight Department Accreditation, which recognizes entities that demonstrate exceptional environmental sustainability standards. Embraer achieved this accreditation through a variety of measures to reduce carbon emissions and waste through flight operations, including more than a 10% reduction in carbon emissions.

ONWARD AND UPWARD

Representing the next generation in travel solutions, Eve Air Mobility is well-positioned within the aerospace supply chain to lead the eVTOL market with plans for its first production facility and further development of the Urban Air Mobility (UAM) ecosystem



As megacities continue to grow and ground transportation systems reach capacity, the appeal of emissions-free air taxis is fueling growth in the electric vertical take-off and landing (eVTOL) aircraft market. By 2030, residents and commuters in congested metropolitan areas will benefit from faster, safer and greener modes of short-range air travel. But regardless of whether they serve passenger travel or cargo operations, new transportation technologies require a strategy for scalability, interoperability and standardization.

The widespread adoption of eVTOL vehicles depends on their ability to integrate and safely operate alongside other airspace users. Between drones, helicopters, general aviation aircraft, as well as commercial aircraft on final approach or departure paths, low-level airspace can be a crowded place. To address this challenge, Eve has developed a software solution to support the integrated operations of all UAM aircraft and announced the completion of its Urban Air Traffic Management (ATM) prototype earlier this year.

Preparing the UAM ecosystem requires a holistic approach encompassing infrastructure, policies and technology. The development of commercial Urban ATM solutions is an ongoing collaboration with regulators, air navigation service providers, fleet operators, vertiport developers, airports, and other stakeholders across the Americas, Europe and Asia Pacific. The ability to advance concepts and develop technology to support the initial operation and scaling of UAM operations from an ATM perspective will depend on safe, efficient and predictable ecosystems to support eVTOL operations.

Concerning eVTOL production, Eve publicized its partnership with Porsche Consulting in 2022 to define a global supply chain macro strategy. Since then, the two companies have combined their aeronautical and automotive expertise to design a highly competitive and optimized assembly line for eVTOLs that prioritizes safety, quality, productivity, and sustainability.

In 2023, Embraer and Eve Air Mobility announced that the first eVTOL production facility will be located in the city of Taubaté, in the state of São Paulo, Brazil. Subject to the final authorities' approval, the manufacturing plant will be situated on a designated portion of land within Embraer's existing unit in the city that will be expanded. "This decision is aligned with our growth strategy plan, which is driven by innovation and sustainability," said Francisco Gomes Neto, President & CEO at Embraer. "We believe in the enormous potential of the global Urban Air Mobility



market, and we reinforce our commitment to Eve as one of the major players in this industry."

In line with Eve's evolution this year, Johann Bordais was announced as Eve's CEO. Before his appointment in September, Bordais led Embraer's Service & Support business since its founding in 2016.

In November, Eve named three new suppliers for its electric vertical takeoff and landing (eVTOL) aircraft. Garmin will supply tailored avionics for the aircraft, featuring the G3000® Integrated Flight Deck, Liebherr-Aerospace will supply the flight controls actuators for the fly-by-wire flight controls of Eve's eVTOL, and Intergalactic will provide the thermal management system. These three suppliers are in addition to three named at the Paris Air Show: Nidec Aerospace LLC, a joint venture between Japan's Nidec Corporation and Brazil's Embraer, providing the electric propulsion system for Eve's eVTOL and BAE Systems, supplying the energy storage system. DUC Hélices Propellers will provide the rotors and propellers.

Across the world, countries are positioning themselves to be among the first to market in adopting zeroemissions UAM. However, the ecosystem development process will require a human and communitycentered approach that extends beyond engineering requirements to launch and scale successfully. Engagement with local communities and national policies can help shape UAM services into what communities want and need, the power to leverage clean energy and tangibly improve the lives of its citizens. \blacktriangleleft



8 · Advantage Vol21 2023

BIG SKY COUNTRY

Montana's vast lands and boundless skies are a compelling gateway to the natural wonders and abundant wildlife found in America's iconic Yellowstone National Park

symbol of the great American West, the state of Montana is a patchwork of rugged wilderness, rolling prairie and a cowboy culture that's as old as its historic ranches. While most of the nearly 3,500-square-mile Yellowstone National Park sits in Wyoming, the most sought-after entrances lie along the western and northern borders, which are best accessed from Montana. Crowned the first national park in the United States in the late 1800s, Yellowstone has been captivating imaginations for decades with its geothermal marvels, diverse wildlife and wild beauty. Situated atop a massive supervolcano, the park is brimming with over 10,000 hydrothermal features, including geysers, hot springs, mud pots, and fumaroles (steam vents). Roaming the conifer forests, and grassy meadows are America's most iconic fauna, including impressive herds of bison, elk and bighorn sheep to apex predators like grizzly bears, gray wolves and bald eagles. But Yellowstone is not just about its geological wonders and wildlife; it's also a place of timeless solitude. The park's unspoiled wilderness offers the chance to escape the cacophony of modern life and find a quiet corner of nature where the only sounds are melodic birdsong and the gentle whisper of the wind.



BIG SKY AND WEST YELLOWSTONE

To explore the park's famous Southern Loop, hang your hat at the 139-key Montage Big Sky, located approximately an hour's drive from Yellowstone's West Entrance. The resort partners with expert naturalists from Yellowstone Safari Co., a premier adventure outfit based in the city of Bozeman.

"We don't offer rehearsed cookie-cutter tours," said Nate Udd, a professional guide and wildlife artist. "Every trip is tailored to guests' interests, and flexible timelines allow us to get off the beaten path and visit popular sights when they're less crowded." Udd recommends setting aside two days to explore the park. This allows ample time to discover highlights of the Southern Loop, including its impressive geysers and steaming hot springs to Yellowstone Lake and the Grand Canyon of the Yellowstone River. The Northern Range is ideal for spotting wildlife roaming wide-open panoramic valleys.

Navigating Montage's ultra-luxury Cadillac SUV, Udd explains that Yellowstone has the highest concentration of geothermal features in the world—more than both Iceland and New Zealand. Water features in and around the 35- by 40-mile caldera are heated by underground volcanic magma, creating an otherworldly landscape that gushes and gurgles while sending giant plumes of steam into the crystal blue sky. Old Faithful is a requisite stop to see both the famous geyser and the historic inn, which is the largest log cabin in the world. But some of the most exciting stops are the ones you won't find on a tourist map—hidden gems the naturalists have uncovered during years of exploration.



EMBRAER TIP

The synthetic vision system onboard the Phenom 100EX easily navigates the parallel runways at Bozeman Yellowstone International Airport (BZN) to reach Montage Big Sky, 45-minute drive from Yellowstone National Park.









Opposite (bottom): Montage Big Sky Resort boasts 139 luxury suite amid the Spanish Peaks Top: Yellowstone has the highest concentration of geothermal features in the world, heated by

Bottom: Onsite outfitter Compa Sports can arrange flyfishing excursions throughout Big Sky's



against the backdrop of the sublime Spanish Peaks. Most notable is the warmth and friendliness of the Montage team, which infuses every interaction, from the bartenders at Alpenglow, the chic centerpiece bar, to attendants manning the 11,000-square-foot spa. Dig into cuts of buttery filet and hand-rolled cacio e pepe at the signature restaurant Cortina, inspired by its Northern Italy namesake, Cortina d'Ampezzo. Mountainside Backcast Bar & Grill and Beartooth Pub & Rec are both crowd-pleasers for a more casual meal; the latter comes with a bowling alley and an arcade. Don't miss the pastries from Wildflower Market, where the chef imports butter and flour directly from France. The spa, a temple of relaxation, has a slick indoor lap pool, steam room and heated plunge pool, as well as a roster of treatments ranging from deep tissue massages using high-grade CBD to complimentary sound baths in the hot tub. Inside, glowing fireplaces, large-format mountain photography and drop-dead views are at every turn, while outdoor hot tubs, a heated pool and a s'mores firepit are great spots to take in the area's glorious sunset skies. Adventure awaits at onsite outfitter Compass Sports, where guests can arrange skiing, flyfishing, archery and horseback riding, as well as hiking and biking Big Sky's expansive network of mountain trails that zigzag stunning crystalline rivers and waterfalls.

Back at Montage, a world of alpine pampering awaits

12 · Advantage Vol21 2023





On the way to Paradise Valley, it's worth stopping in downtown Bozeman to stroll Main Street—a buzzy strip lined with art galleries, independent boutiques, restaurants and brewpubs catering to residents and college students from Montana State University. Livingston, a quintessential western town nestled in the scenic Yellowstone River Valley known for its rugged beauty and small-town charm, was a favorite of the late Anthony Bourdain for its vibrant dining scene. It's also a literary hub home to more writers per capita than any other city in America.

A 20-minute drive from the town center sits the newly minted glamping retreat Under Canvas North Yellowstone in the shadow of the Absaroka Mountains. The location is perfect for accessing Yellowstone's Lamar Valley-an area referred to as the Serengeti of North America for its quantity and diversity of wildlife species. Head out before dawn to maximize your chances of spotting grizzlies and wolves before the summer sun drives them into the forest seeking shade. Thanks to Yellowstone Safari Co.'s expert guiding and powerful spotting scopes, you'll be put in the best position to see baby cubs wrestle behind a mama bear digging for caraway, watch a yearling wolf prowl through a large herd of bison searching for easy prey, or spot witness coyotes and pronghorns dart for the hills as a wolfpack patrols its territory. If you're really lucky, a grizzly might lumber across the road right in front of your car.

Top: Discover diverse wildlife species with an expert guide from Yellowstone Safari Co.

Below: In Yellowstone's Lamar Valley, visitors can spot grizzly bears, wolves and large bison herds

Opposite (left): At Under Canvas North Yellowstone, tents comprise king beds, flushing toilets, hot water showers, and woodburning stoves

Opposite (right): 20 minutes from downtown Bozeman lies Under Canvas North Yellowstone, a newly minted glamping retreat in the shadow of the Absaroka Mountains





To see the breathtaking panorama from a different perspective, tap lifelong local Rowdy Nelson of Rowdy River Guides for a pleasure float down the Yellowstone River. He'll point out the 19th-century ranch where he grew up riding horses and competing in rodeos, the quaint schoolhouse where he spent youth, and regale you with tales of his young-gun years working at Chico Hot Spring Resort—famous for its A-list clientele including Dennis Quaid and local residents Jeff Bridges and John Mayer.

The 50-acre Under Canvas camp is a destination in its own right. Strewn along more than a mile of scenic riverfront, it's ideal for fly fishing, rafting and kayaking. Come nightfall, campers dine on tasty cuisine and roast s'mores around cozy firepits while a local musician plays. Tents lack nothing in the way of comfort with king-size beds (book one with a stargazing window), flushing toilets, hotwater showers, and woodburning stoves stocked with firewood. While you shouldn't expect Wi-Fi or electricity in your tent, you can text on-call attendants around the clock for help starting a fire or request a hot water bottle on chillier evenings. Private decks are designed to appreciate the hush of silence that pervades the camp, broken only by the gentle murmur of the Yellowstone River as it makes its journey northward. At sunset, pull up a seat as the sun paints the Absarokas in a brilliant golden hue and watch in awe as it slowly fades to a rosy alpenglow under an infinite Montana sky. **←**



A VOICE FOR GREATER YELLOWSTONE

The Greater Yellowstone Coalition is a nonprofit organization with a mission to protect the lands, waters and wildlife of the Greater Yellowstone ecosystem for present and future generations. With strategic offices in Montana, Wyoming and Idaho, it engages in local, regional and national efforts to safeguard this unique region, renowned for its native wildlife and pristine natural beauty.

Its vision encompasses a park where nature thrives, communities coexist harmoniously and collective efforts conserve this globally significant region. The coalition strives to secure vital habitats and freedom of movement for wildlife, combat regressive policies and advocate for science-based approaches to protect Yellowstone's ecology, economy and social fabric. Visitors can support its various advocacy efforts to ensure the park's continued flourishing.

greateryellowstone.org

EXPERIENCE EXCELLENCE IN THE ALL-NEW PHENOM 100EX

Unveiled this October, Embraer's Phenom 100EX offers unmatched cabin comfort combined with the highest levels of operational versatility and enhanced pilot-centric avionics to deliver the ultimate flying experience to those in the cockpit and the cabin

What does it mean to experience excellence? This is the first question engineers asked themselves when they began designing what later became the Phenom 100EX, based on the Phenom 100EV. The latest iteration of the series had one goal in mind: deliver even more experience and value to both passengers and pilots. With a reputation for engineering excellence, Embraer's team of engineers went to work elevating the experience inside the aircraft so that no matter where you sat, you were in for the ultimate experience.

The result? An aircraft built for fanatics. Starting with the cabin, craftsmanship meets innovation in a space where comfort is paramount with the tallest and widest cross section in its class combined with abundant natural light through extra-large windows. The best-in-class, high-tech interior design transforms every flight

into a journey of relaxation or productivity. The enhanced seating design lends to better ergonomics. Sleek upper tech panels offer access to all cabin controls with the touch of a finger. And flush-to-the-wall tables deliver 35% more space for work and leisure.

But while the newest iteration offers many new features to elevate the cabin comfort, it also manages to preserve and reinforce those features that customers already loved, such as the most complete airstair in its class, largest entrance door, and most accessible and versatile baggage compartment in the category. Additionally, features like a side-facing fifth seat and belted lavatory are now baseline.

Safety and single-pilot-friendly features are at the heart of the Phenom family of jets. In the cockpit of the Phenom 100EX, enhanced Below (left): The cabin boasts the tallest and widest crosssection in its class

Below (right): Seat enhancements, including armrest movement, improve the ergonomics







avionics, as part of the acclaimed Prodigy Touch, based on Garmin 3000, elevate the pilot's experience, reducing workload and making every flight smoother, more intuitive and safer. It is the first in its class to feature ROAAS, short for Runway Overrun Awareness and Alerting System, which acts during critical moments of the approach and landing, monitoring several parameters to build a clear picture of the anticipated landing conditions and provide pilots appropriate situational awareness.

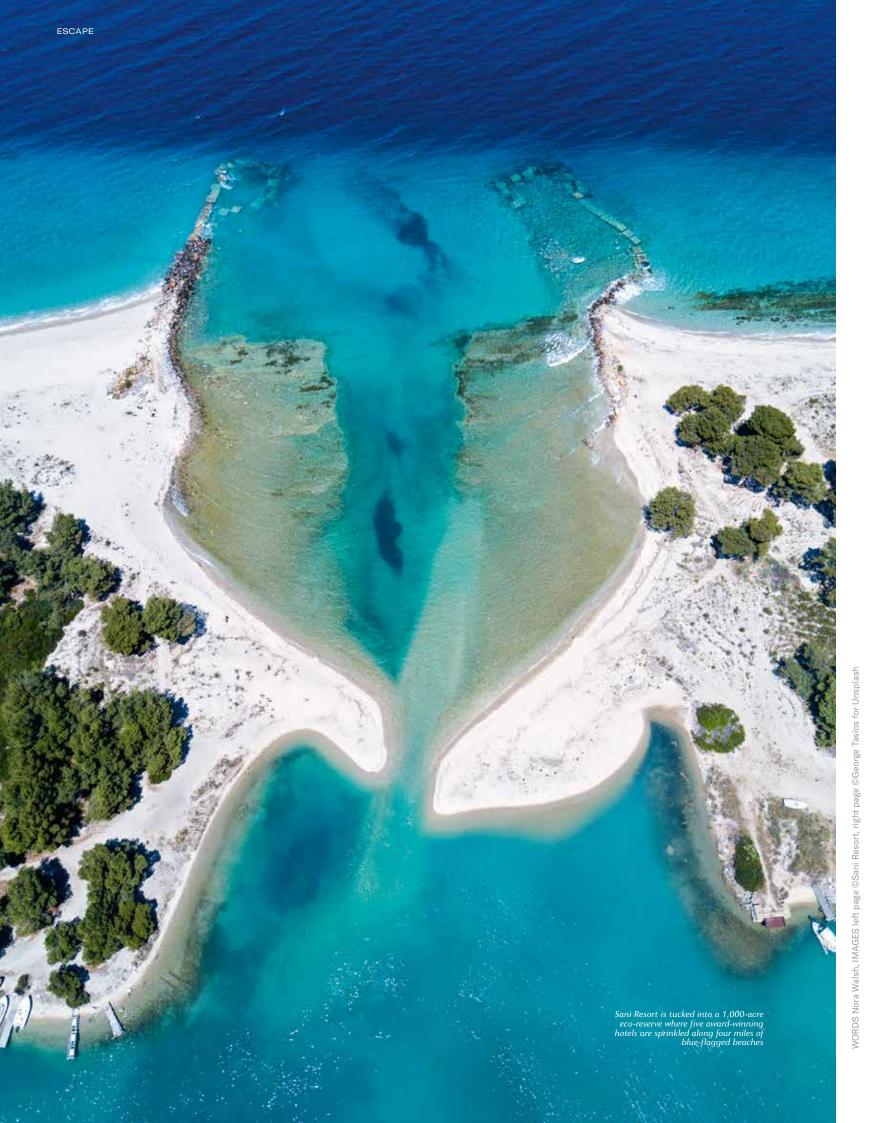
In addition, avionics improvements—some of which are now baseline and others optional—include FlightStream 510, predictive windshear, stabilized approach, and automatic 3D volumetric scanning with lightning and hail prediction. The cockpit design embraces Embraer's Design DNA, offering pilots the utmost comfort with further legroom provided by extended seat tracking and an open-concept cockpit for easier interaction with the cabin.

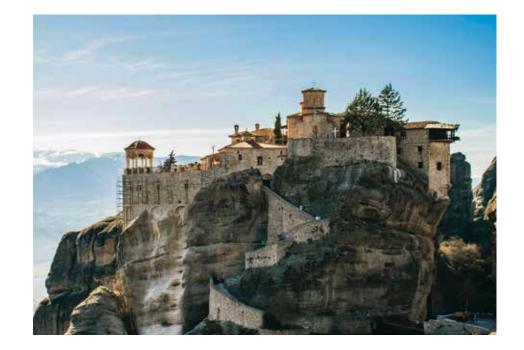
When it comes to operational versatility, the Phenom 100EX takes mission flexibility to new heights. The aircraft effortlessly adapts to diverse travel needs, from business trips to leisurely getaways, and navigates smaller airports and challenging destinations with ease, putting passengers closer to their final destination. Benefiting from the Phenom family's reputation for high utilization and low maintenance costs, the aircraft is one of the greenest dual-engine jets on the market, culminating in a versatile aircraft built for the journeys ahead.

The Phenom 100EX isn't just a jet; it's an embodiment of comfort and innovation harmoniously entwined. The high-tech interior design represents the epitome of comfort, while its operational versatility and single-pilot-friendly avionics ensure both passengers and pilots are ready for any journey. Ultimately, the Phenom 100EX was built for those who demand excellence. Visit embraer.com/phenom100ex to learn more. ◀



Scan the QR code to watch the full product video.





AN AEGEAN JEWEL

Like a Mediterranean nirvana, the Halkidiki Peninsula in northern Greece promises crystalline Aegean vistas, golden beaches and ancient relics whispering tales of civilizations past

he northern reaches of Greece are often overlooked in favor of its more high-profile southern islands, and there's a host of travelers who are keen to keep it under the radar. A landmass with three slender legs jutting from the mainland, Halkidiki has a scattering of swish accommodations, not least Sani Resort, situated on Kassandra, the westernmost leg of the peninsula, only a 50-minute drive from Thessaloniki Airport. Tucked into a 1,000-acre eco-reserve, Sani Resort comprises five awardwinning hotels sprinkled along four miles of blueflagged beaches backed by pine-clad forests and broad wetlands.

"I have clients who go every year for several weeks at a time with their families because everyone has such a good time," said Maria Gregoriou, Managing Partner of the Greek luxury travel company Kudos Life Experiences. "My VIP clients stay at Sani Asterias, the most exclusive of the hotels, due to its very high guest-to-staff ratio." The property is currently undergoing

an overhaul and will be ready for the 2024 summer season. "It's very private, very comfortable and very well-managed."

With such a variety of choices, the resort caters to all types of travelers, from couples to families looking to spend quality time together. "Because Sani offers excellent childcare services and so many fun activities for kids and teens, parents can truly relax knowing their children are safe and entertained," said Gregoriou. Young athletes can level up their game at the Rafa Nadal Tennis Center, touting with eight clay courts, a clubhouse and instructors specially trained in the tennis champion's fitness program and psychological training. Fans of "the Blues" can do their pre-season soccer training at the Chelsea Football Academy or learn useful life skills at The Bear Grylls Survival Academy among the wetland's diverse flora and fauna. There's also ziplining, archery, a pump track, beekeeping, and forest hiking. And that's just on land. At sea, there's an endless roster of watersports,

including wakeboarding, Hobie Cats, parasailing and Jet Skis. As a family, guests can take eco-tours guided by a naturalist, embark on a day-long sailing trip in a yacht or catamaran, or splash around together in Greece's largest heated swimming pool.

Parents are equally entertained. Each hotel has its own Anne Semonin spa, beach club and dining outlets. Sybaritic adventures abound at the resort's 40 restaurants and bars, which take bon vivants from Greece to Japan to Peru through their taste buds (Three of those restaurants have menus designed by a Michelin-starred chef). During the annual Sani Gourmet festival, a stellar line-up of acclaimed chefs and emerging culinary talent offer moonlit feasts and gourmet bites showcasing the world's most delicious gastronomic trends.

Gregoriou recommends enjoying a nearby wine-tasting experience at the vineyards of Domaine Gerovassiliou. "Greek wines are very underestimated. We have such a small production, so it's rare to find them out of the country," said Gregoriou. "People are genuinely surprised by how good they are." Gregoriou can also arrange for truffle hunting with a guide and dog near the monasteries of Meteora or a cooking class with a local grandmother to make skopelitiki pita, a round snail-shaped cheese pastry.

Another summer tradition includes the arts-focused Sani Festival featuring big-name musicians, jazz performances, modern dance and musical theater, all enjoyed under a star-speckled sky.

Halkidiki itself is packed with historic sites. Mount Olympus looms large in the landscape; Greek philosopher Aristotle was born here (his statue sits in the village of Stagira); and Dion Archaeological Park is strewn with ancient Greek and Roman theaters, bath complexes and sanctuaries dedicated to gods and goddesses. But perhaps the most famous of all is the holy mountain of Mount Athos, home to a UNESCO-protected monastic state governed by a flock of monks. A longstanding patriarchal tradition bars women from visiting the site, and male visitors must qualify for a special permit (of which only a limited number are issued each year). "We organize day cruises around the Athos peninsula because it offers spectacular views of cliffside monasteries from the water," explained Gregoriou.

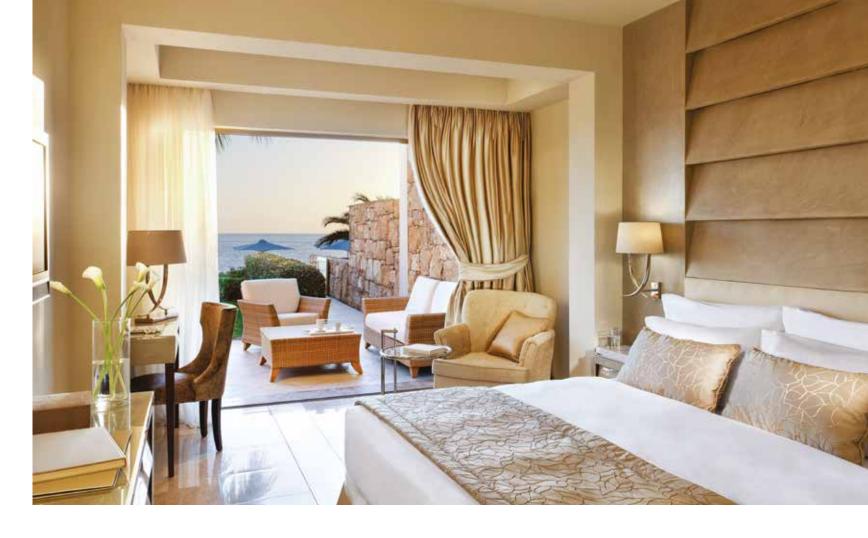
Under the water, certified divers can get a look at what's considered one of the most spectacular dive sites in the Mediterranean. The Alonissos Underwater Museum opened to the public in 2020, featuring one of the biggest Classical-era shipwrecks dating back to approximately 420 B.C. "They call it the Parthenon of shipwrecks because of the thousands of intact wine vessels they found within the ship," Gregoriou noted. "It is rare for travelers to venture beyond Sani Resort because there's so much to do on-property, but when they do, they're not disappointed." ◀



Left: With 40 restaurants and bars, guests are taken on a culinary journey from Greece to Japan and Peru

Opposite (top): Sani Suite Collection guests enjoy unparalleled comfort in spacious one, two and threebedroom suites at Sani Asterias'

Opposite (bottom): At Sani Resort guests can take eco-tours guided by a naturalist or embark on a day-long sailing trip in a yacht or



SUSTAINABILITY FACT

In 2020, Sani Resort became the first certified carbon-neutral resort in Greece and has been named the "World's Leading Luxury Green Resort" by the World Travel Awards for three consecutive years. Its sustainability ethos is anchored in initiatives dedicated to improving energy efficiency and increasing renewable energy usage, water conservation and sustainable procurement practices. An ambitious roadmap has the resort on track to achieve a triple-zero goal: no single-use plastics and zero waste by 2024, and net-zero carbon emissions by 2030. Sustainable transportation options, including electric cars and charging stations, are available. Sani has partnered with organizations like Bee Camp to support pollinators and ISea to monitor dolphin populations. The resort also supports a number of biodiversity projects, tree-planting initiatives and local farmers using sustainable practices. Utilizing cutting-edge AI technology, the resort is actively reducing food waste and experimenting with its first zero-waste restaurant, Tomata. sani-resort.com



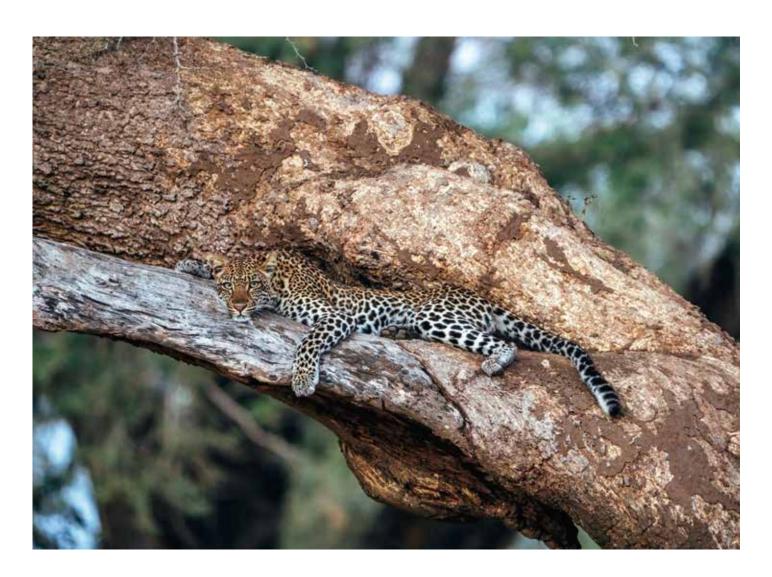
EMBRAER TIP

Equipped with the largest windows in its category and a touch-controlled flight deck, the **Phenom 300E** provides an enjoyable descent into Thessaloniki Airport (SKG) on the Greek shores of the Aegean Sea, followed by a 50-minute ride to Sani Resort in a private car.



Travel Gems

We've scouted far reaches of the globe to uncover new destinations, where top-tier luxury is paired with purposeful experiences for a more profound sense of place, cultural enrichment and the freedom to rebalance in nature



SAFARI LUXURY IN ZAMBIA

Anabezi is a wildly charming carbon-neutral safari camp surrounded by glowing ana tree forests in the furthest reaches of Lower Zambezi National Park, Zambia. Twelve spacious canvas-clad safari suites, including one family suite, boast leisure spaces, king beds and ensuites while outside, private plunge pools and showers give way to sweeping views of the Zambezi River and wallowing hippos below. At the heart of camp, guests can meander freely on elevated boardwalks between open-air decks and glistening swimming pools while watching elephants and antelope ramble by. Here, charismatic local guides lead private daily game drives, walking safaris, boat cruises, and fishing

charters through the verdant Zambezi Valley, where African wild dogs, leopards, lions, and elephants mesmerize even seasoned safari-goers with intriguing behavior. Recently, Anabezi introduced Zambezi Harvest, a community initiative to promote sustainable agriculture and source fresh produce from local growers, adding to its all-inclusive menu of wholesome chef-prepared fare, plant-based alternatives, and mixologist-designed cocktails, best savored under the stars. To get to Anabezi, arrive at Lusaka International Airport and take a 35-minute scenic flight to Jeki Airstrip, where 1600 square miles of protected wilderness await discovery. anabezi.com

TROPICAL MANSION



Located just five miles from St. Maarten and 18 miles from St. Barts, Anguilla is lauded for its postcard appeal, hidden caves, ancient trails, and burgeoning local cultural scene. To find beachside serenity, check into Quintessence, a vibrant boutique hotel overlooking Anguilla's Long Bay Beach. With just nine suites, including the Joseph Penthouse, Quintessence reveals ocean views, an idyllic private beach, butler service and the largest Haitian art collection outside Haiti. While here, explore 33 beaches on a yacht charter and wander to Julian's at sunset, where Executive Chef Dominique Thevenet creates an oceanside fine dining experience, combining European and local Caribbean flavors. *qhotelanguilla.com*

A NEW SANCTUARY

This September saw the opening of &Beyond Punakha River, Bhutan. Built on the banks of the Mo Chhu River with views of the Himalayas, &Beyond's first lodge in Asia was conceived to include six tented suites, a two-bedroom villa with a private pool and a one-bedroom villa with a plunge-pool-come-hot-tub. While the generous interiors echo the spirited culture of Bhutan, the focus remains on the lodge's captivating natural setting that allows guests to enjoy walking trails, beach activities, swimming, cycling, river rafting and alfresco rice-paddy lunches. Early mornings can be spent visiting the Khamsum Yuelley Namgyal Chorten, famed Punakha Dzong and the Sangchhen Dorji Lhuendrup Nunnery.

andbeyond.com



AUSTRALIAN PARADISE

On a quiet northern corner of Hamilton Island, you'll find qualia surrounded by Australian bushland and glistening Coral Sea views. Designed to beckon nature, qualia's luxurious pavilions and north-facing two-bedroom Beach House—complete with a private 40-foot infinity pool—entice guests into a laid-back island bliss. While here, drift to the award-wining Spa qualia for revitalizing body and face therapies using Australian botanicals. To experience the wonder of the Great Barrier Reef, guests can book snorkeling and diving adventures, chartered boat rides and scenic flights across the magical Whitsundays. Dine at Pebble Beach and Long Pavillion for a locally sourced epicurean journey, or opt for a sunset Talk & Taste with qualia's legendary in-house sommelier. Great Barrier Reef Airport offers direct flight access and private jet parking, just moments away from qualia via VIP transfer. *qualia.com.au*



BAREFOOT BAHAMAS

On South Andros, the largest but least populated island in the Bahamas, you'll discover the world's third-largest fringing reef, countless Blue Holes and over 90 miles of secluded beaches. Nestled here is the newly opened boutique resort Caerula Mar Club, accessible via a 20-minute flight from Nassau or a 60-minute flight from Fort Lauderdale's Executive Airport. Five private villas and 18 clubhouse suites cater to guests seeking beachside privacy and barefoot luxury. With 10 acres of pristine ocean frontage to explore, Caerula Mar Club invites guests to dive, snorkel, boat and fish. While onshore, sun-drenched days are enhanced by tapping into the property's spa and fitness center. caerulamar.com

HIGH IMPACT SAFARI

African Bush Camps' Impact Safaris traverse three countries to uncover a rich tapestry of cultures, meet a flourish of Africa's enamored wildlife species, explore untamed swaths of land and water, and make a lasting contribution to humankind

o truly grasp the spirit of Africa, travelers must venture beyond traditional itineraries to uncover stories of enduring resilience and a deeper connection to wildlife, people and the planet—reminding us that the most enriching journeys are born from traveling for good.

Many rural communities across southern Africa face struggles most cannot comprehend. Pregnant women walk miles to fetch water in the midday heat; young children navigate wildlife areas to attend school outside without resources, running water or toilets; medical clinics are under-resourced and over-crowded; farmers lose crops and livestock to wildlife; and poaching tightens its grip on hungry families. And while fundamental human rights like access to clean water, food, sanitation, education and healthcare are barriers millions encounter daily, it's compelling tourism trailblazers and travelers to take urgent action.

When African Bush Camps' Founder Beks Ndlovu built his first camp in his homeland of Zimbabwe in 2006, his vision was to showcase Africa's captivating wilderness while combatting wildlife poaching, unemployment, food scarcity, poor education, insufficient healthcare infrastructure, and low school attendance. By establishing the African Bush Camps Foundation (ABCF), ABC can initiate life-changing projects, demonstrating how partnering with local communities is essential to preserving natural resources, improving the quality of life of its residents and achieving long-term conservation outcomes.





Almost 20 years on, ABC now has 18 wildly luxurious camps and lodges scattered across spellbinding destinations in Botswana, Zambia and Zimbabwe, promising a deeply authentic safari rooted in meaningful experiences that have a tangible impact at a grassroots level. "Guests are increasingly more intentional about where they invest their time, money and effort. It's becoming less about consuming and more about how one is adding value in a meaningful way," said Koinonia Baloyi, Communications and Fundraising Officer for ABCF. When booking, ABC donates USD 10 from every bed night towards ABCF's operational costs so that every donation received goes directly towards local projects that guests can visit while at camp. In 2022 alone, ABCF provided 8,990 meals to 707 learners across three schools and treated 3,000 patients at its rural clinic. "We so often underestimate the power of a little and how a small act of kindness can amount to much," commented Baloyi, illustrating that for the price of just two coffees, the nonprofit can provide two meals for a child, purchase seeds for a three-month harvest, provide sanitary pads for a year for one girl, supply stationery for a term for one learner, or provide two chickens to a rural homestead.

To broaden its impact, ABC recently unveiled three Impact Safari itineraries to immerse guests in the untamed beauty and wildlife of Botswana, Zambia and Zimbabwe while learning how ABCF tackles localized challenges across 13 projects by investing in three core pillars: developing learner education,



op: Through ABC's Learner Development Safari, guests have the opportunity to visit local schools in na. Zambia and Zimbabw to see ABCF's impact firsthand

Bottom: When booking, ABC donates USD 10 from every bed night towards ABCF's perational costs so that ever towards local projects centered

Opposite (top): Set on the banks of the Khwai River Khwai Leadwood boasts just six quest suites and one family suite for a highly

Opposite (bottom): Khwa Leadwood's local guides lead daily game drives through Khw ınitv Concession and Morem

women's empowerment and conservation. "As guests move on a safari through our camps, they experience a vast difference in the landscapes, variety in game and wildlife and even climate. Similarly, the challenges are different, and so are the solutions we are implementing on the ground," said Baloyi.

ABC's new nine-night Learner Development Safari through Botswana, Zambia and Zimbabwe "takes guests away from just being spectators in a game vehicle to being contributors and collaborators in the areas and wildlife spaces that they are visiting," shared Baloyi.

LEARNER DEVELOPMENT SAFARI DAYS 1 – 4

Marooned in Botswana's magnificent Okavango Delta, Khwai Leadwood is an intimate and delightfully designed safari camp on the edge of the famed Moremi Game Reserve. Perched on a riverbank, guests will explore a vast ecosystem of lush wetlands, islands and pristine waterways where migratory birds are spotted in droves, along with thrilling sightings of African wild dogs, lions and elephants. Between sunrise game drives and peaceful afternoon mokoro rides (traditional dugout canoe), ABC's local female guides accompany guests through the neighboring Khwai Community to see firsthand the impact their stay has on its residents.

In a partnership with Khwai Private Reserve and Naletsana Foundation, ABCF established the





Conquer the distance between where you are and where you want to be in the Praetor 600 with a best-in-class intercontinental range and a smaller carbon footprint.

village's only preschool, providing essential early childhood development and schooling, meaning children no longer walk long distances to access education. While here, guests will lend a hand at the preschool's nutrition program that provides every child with a substantial—and often their only daily meal. Alleviating the burden on families, the





Left: In Mosi-Oa-Tunya National Park, guests can walk beside Zambia's last remaining white

Opposite (top): Located upstream from Victoria Falls, Thorntree River Lodge boasts privates suites nestled on the banks of the mighty Zambezi River

addition of Khwai's preschool frees mothers to pursue employment, like the female guides program at Khwai Leadwood designed to upskill and empower local women to become qualified safari guides, bridging the industry's gender gap and helping whole communities rise. "This is generationally inspiring the girl child to believe in the importance of education and to dream to achieve more than just caring for the household and working in the kitchen," said Baloyi. "The success of the female guides in our program is a success story for every girl."

DAYS 4-7

Just outside of Livingstone, in Zambia, students walk over 12 miles to learn at Maunga Primary School. Together with Go2Africa, ABCF has renovated classroom facilities, built ablutions, supplied learning materials and resources for students, and implemented an edible garden-complete with elephant-proof fencing-to complement the school's vital nutrition program. Just nearby, discover the ABCF-built Maunga Clinic, fully equipped with a maternity ward and onsite solar-powered accommodation for medical personnel. In years past, women had to walk to the nearest hospital 10 miles away or give birth in their rural village without medical help. Remarkably, the addition of the clinic and onsite staff has drastically reduced mortality rates of mothers and babies during labor and provided life-changing access to healthcare and family planning for the growing community.

Guests stay upstream from the thundering Victoria Falls at Thorntree River Lodge, which boasts private pool suites, enchanting sunset cruises on the Zambezi River, game drives through Mosi-Oa-Tunya National Park, and the privilege of walking beside some of Zambia's last remaining white rhinos under 24-hour defense from poaching.

DAYS 7 - 10

To conclude the journey, guests can stay at Bumi Hills Safari Lodge, overlooking the vast Lake Kariba just outside of Matusadona National Park. Nearby, at Mangwara Primary School, 302 children from grades one to seven rely on new infrastructure built by ABCF to learn and complete their education. A visit here will delight learners, who are eager to show their new classrooms, ablutions and even their soccer skills. Before ABCF's investment, 10,000 people in the Mola community relied on one manual water pump. Today, both the school and the community have the benefit of a solar-powered water pump. While here, guests can "Build a Boma," to support ABCF's human-wildlife conflict efforts, aiming to protect livestock from predators, using a cloth enclosure.

Alternatively, in Zimbabwe's beloved Hwange National Park, Somalisa Expeditions captures the essence of true African wilderness with comfort under canvas. Surrounded by vast savannah plains and acacia forests, guests can watch herds of elephants against a



flaming sunset and reconnect with nature on walking safaris led by legendary local guides. Guests then visit the nearby Mambanje and Dete communities to see ABCF's impact firsthand in a region once ravished by poaching. "By supporting communities, educating their children and putting food on their tables, we actively tackle the main contributor to poaching in our national parks," explained Baloyi. "An educated learner with food on the table is more likely to become an ambassador for conservation and preserving wildlife. Our conservation efforts are equipping communities to live in harmony with wildlife by implementing preventative measures that will help them keep their livestock safe from predators," she added.

At the start of 2023, ABC pledged 20,000 meals to learners who otherwise would have gone without, 10% of every booking for ABC's Learner Development Safari, and the option to contribute to projects monthly, meaning every guest can make a difference in communities where even the smallest contribution is a statement of hope. "The work on the ground doesn't stop when the safari ends. Our call is for guests to keep connected and partner with us long after they have gone home," Baloyi concluded. ◀



A PASSION FOR FLIGHT RUNS IN THE FAMILY

Peter Smyth and son Ethan Smyth are pilots for OnLogic, an industrial computer manufacturer headquartered in Burlington, Vermont. Together, they fly the company's Phenom 300E. Advantage sat down with the father-son duo to discuss their passion for aviation, corporate flight and the world's best-selling light jet

How did your family first get the aviation bug?

Peter: My interest in aviation started early, at age 10 or so. Flying was not something that my family had been a part of, but when I discovered airplanes my interest was peaked. I started taking periodic flying lessons with a family friend, requiring a phone book to sit on to see out of the windshield. I began to read all I could find about flying, began to attend air shows and continued to fly with friends. As I became older I began to consider aviation as a career, flying airplanes specifically, and attended Embry-Riddle Aeronautical University. This is where I met my wife, Amanda, who was also following her passion for aviation.

Ethan: Aviation has been part of my family for generations and part of my life since birth. My great-grandfather, grandfather, mom, and dad were all pilots. At three months old I took my first flight in the back of an Embraer 120 Brasilia that my Dad was flying. Growing up with parents in aviation was influential in catching the aviation bug. There was no pressure from my family to commit to any particular career path, but I knew early on that flying was the only career I wanted to pursue.

Peter, you have extensive experience in commercial and private aviation, particularly with Embraer aircraft. Can you tell us a bit about that?

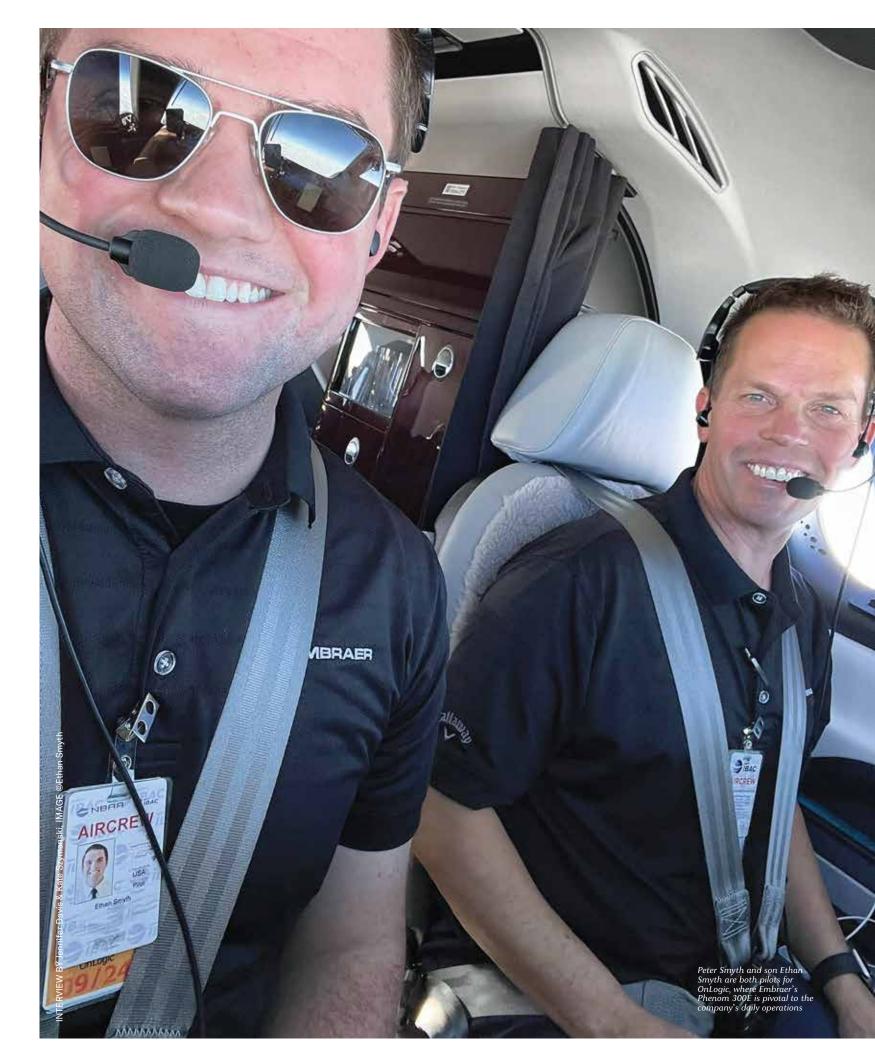
Peter: I was fortunate to be hired by a regional airline (Express Jet Airlines) two years post university graduation. This was also my introduction to the Embraer family. I remained with this company for the next eight years, flying both the EMB-120 Brasilia and the EMB-135/145 Regional Jet. Next I transitioned to Continental Airlines / United Airlines, working there for the next six years flying the B-737. In 2011 we were called in a new direction and I stepped away from aviation, moved to northern Vermont with my wife and family, and started an in-home elder care business. After spending almost 10 years in this role, I was brought back into aviation by my son, Ethan. He had started teaching a couple and their children how to fly. This couple owned a local business and were also interested in aviation to further the company's growth. I ended up stepping back into flying through this new opportunity and rejoined the Embraer family flying the Phenom 300E as a corporate pilot for OnLogic.

Ethan, you had an impressive transition from CFI (certified flight instructor) to pilot of a Phenom 300E. To what do you credit your success?

I would attribute that to my education and training. I was fortunate to attend Embry-Riddle Aeronautical University where I gained knowledge, training, and experience that made the transition from the Cessna 172 to the Phenom 300E quite simple.

As a manufacturer of industrialized computers, OnLogic certainly has a special appreciation for technological innovation, which is something it has in common with Embraer. Did this influence their decision to purchase the Phenom 300E and join the Embraer family?

Yes! In looking at other options in the light jet market, there was a stark difference in technology and innovation when compared to the Phenom 300E. It was a fairly easy decision to choose Embraer's light jet given the lack of real competition in its class.



We hear OnLogic is a close-knit team and that most employees have the ability to utilize the aircraft for flights between Burlington, VT, and Raleigh, NC. Can you tell us more about piloting for OnLogic?

Peter: OnLogic is a close-knit team despite having offices in the US, Europe and Asia. The company culture is alive and well throughout the organization. OnLogic's core values are: open, fair, independent, and innovative. These were modeled by the company's founders, Lisa and Roland and are a part of everything the company does. Both Roland and Lisa are certified pilots as well. I feel fortunate to know that they are overseeing not only the company, but the flight department as well. They both have a thorough understanding and respect for aviation, have an uncompromising commitment to safety and are supportive in the decisions that we, as pilots, make to reduce risk and increase safety.

How does OnLogic use their Phenom 300E to support operations?

Ethan: The Phenom 300E is a time machine, mobile office, and a way to unite colleagues who otherwise would not interact with one another in person. We have the capability to fly colleagues halfway across the country to conduct meetings and all be home for dinner that night. It allows collaboration in the air, serving as a mobile office where work can continue to be completed. The Phenom 300E also serves as a tool that permits consistent company culture within multiple office locations, promoting frequent in-person collaboration.

Lisa Groeneveld, Co-founder of OnLogic with her husband Roland Groeneveld, has her pilot's license and instrument rating? Did either of you have a hand in her training? Do you ever fly the Phenom 300E together? Ethan: Yes. I was Lisa's primary flight instructor for both Private, Instrument and soon to be Commercial. Roland also has his private pilot's certificate and I was able to be his instructor as well. In terms of the company's Phenom 300E, it is always flown as a crew and done so with Peter and I at the controls.

What is your favorite feature onboard the Phenom 300E?

Peter: I would say my favorite feature onboard the Phenom is the avionics system. The G3000 presents a wide range of information in an ergonomic package that is specifically designed to increase situational awareness, which in turn drives flight safety.

Ethan: My favorite feature of the Phenom 300E is the takeoff and landing performance. The thrust-to-weight ratio of the airplane, particularly at low altitudes, is significant and impressive for both pilots and frequent passengers.



Ethan, we hear your license plate is inspired by Embraer. You're clearly a big fan. What drew you to Embraer in the first place?

Ethan: The license plate is a subtle hint that those in the aviation community would appreciate. Two things drew me to Embraer. One was my Dad's previous job flying the EMB-120 and EMB-145 for Continental Express which made an impression early in my life. Second was my love of the Phenom 300 series. I remember sitting in the back of my grandfather's car in the summer of 2010 at age 11 looking at an article in Flying Magazine showcasing the brand new Phenom 300. I'm not sure if it was because it looked like a mini ERJ or if it was just a cool airplane, but from that point forward when asked what my favorite airplane was, my answer was always the Phenom 300. It's an understatement to say that just 11 years later, taking delivery and flying away from the factory in a brand new Phenom 300E was a surreal experience.

Ethan and Peter, you've managed to leverage your unique perspectives as a family of pilots to build a social following. Can you tell us more about what resonates with your audience?

Flying and airplanes are cool! It captures the imagination of many and provides a perspective that very few people have on a daily basis.

Combining that with the fatherson relationship in a flight crew environment just seemed to resonate naturally with those on social media.

✓

To see more of Ethan and Peter's flying, check out their Instagram profiles @phenom_pilot and @flyingsmyths.





SEAWEED SAVIOR

In a world where food, farming and fast fashion are three industries desperately needing a sustainable, large-scale shift to decrease their carbon footprints, algae could be the super-crop solve-all





Opposite: Seaweed reduces acidification in the water and provides a habitat for marine life as it grows

Above: For the past three decades, Algamar has been harvesting wild kelp on the northern Spanish coast, where it flourishes here in clean, cold water, fed by currents that bring

lgae's kaleidoscope of benefits has garnered growing attention from start-ups, multinationals and farming communities over the last decade. Algae range from simple, photosynthetic organisms from single-celled forms to larger, multicellular varieties, such as seaweed and kelp.

They produce oxygen, sequester carbon, help nutrient cycling and serve as the foundation of aquatic food chains. Coastal seaweed and underwater kelp forests also help slow erosion and provide habitats for marine ecosystems.

As sources of biofuel and carbon sequestration, they play a crucial role in using blue carbon to mitigate climate change. It's estimated that algae store around 175 million tonnes of carbon each year—equal to 10% of the world's car emissions, while kelp forests can lock away 20 times as much carbon as trees do.

We are rediscovering the incredible range of applications for seaweed and kelp, which are rich in nutrients and protein and present a sustainable solution to the growing global demand for nourishment. In fashion, algae-derived textiles offer a renewable alternative to resource-intensive fabrics.

Algamar has been harvesting wild kelp on the northern Spanish coast for almost three decades. It flourishes here in clean, cold water, fed by currents that bring micronutrients from the depths of the Atlantic. It produces such high-quality seaweed, Japan now imports nori and other species from the region.

For Jean-Marc Emden, CEO at Algamar, the easiest way for algae to help change the world is to use it directly as a food source. "The UN thinks we have 50-60 harvests left in our soil, so we said what happens post soil is seaweed," he said. "Seaweed is net positive by 20%; it produces 90% of the vitamins, minerals and proteins that we need to eat, and it doesn't need soil or to be farmed. It's incredible."

As seaweed is so high in nutrients, if we ate more of it, he says, it could replace supplements as well as ingredients. According to Algamar, "Wild harvested algae yields more essential amino acids and vital nutrients using 100% fewer resources per acre than traditional or any form of sustainable land farming, while providing 50% better absorption of omega-3 than fish and krill oils."



"By creating our first twoand-a-half-acre kelp farm, we attracted otters, sealions and eagles, all of which came to feed on the huge numbers of salmon kelp attracts, as the fish can feed and hide in the forests."

"Animal protein is the elephant in the room," said Emden. "92% of deforestation in Brazil is for cows, and so we need to replace animal protein with seaweed. We need one big global brand to make a stand and jump into seaweed as a food source, then governments and consumers will follow."

Algamar harvests wakame, dulce and nori, among other species, from the wild coastal forests off Galicia. Six months later, the forests have regenerated, meaning Algamar doesn't have to farm, just simply harvest what grows naturally.

"It's not complicated to harvest, dry and ship it," Emden said. "It grows back quickly so you know how much you can harvest on each coastline, and it's labor intensive by hand, which means we employ coastal communities and supply them with good, stable jobs each year. We don't want to bring in big machines but give fishermen a sustainable new trade to learn."

Over on the west Pacific coast, in British Columbia, Canada, Mike Williamson, CEO at Cascadia, is also using large-scale kelp farming to engage and employ coastal communities, in his case, the First Nations, who have been harvesting and using seaweed for thousands of years.

Cascadia started with two two-and-a-half-acre farms in 2019 and aims to grow to farm and harvest 2,470 acres. They have taken a different approach, commercially seeding and farming sugar kelp to create seaweed-derived products for crop and cattle farmers to replace harmful nitrogen-based fertilizer and industrial animal feed.

As well as being packed with vitamins and creating incredible products, seaweed is hugely beneficial for coastlines. It reduces acidification in the water and provides a habitat for marine life as it's growing. "By creating our first two-and-a-half-acre kelp farm, we attracted otters, sealions and eagles, all of which came to feed on the huge numbers of salmon kelp attracts, as the fish can feed and hide in the forests," Williamson explained. "We even saw a family of bears foraging in the washed-up kelp; it's a cornerstone species that helps restore our Canadian eco-systems."

Rewilding aside, for Cascadia, the case of seaweed is simple. It makes economic sense. "We want to produce a seaweed-based product at a price people want," Williamson explained. "British Columbia is the 'goldilocks zone' for seaweed, which likes colder waters to grow. We can also access the entire North American farming market as they turn away from

industrial monocultures and move toward more sustainable solutions, as well as Asia's. We're working on producing 35,000 tonnes of seaweed, which will be turned into bovine feed and biostimulants for farming."

While farming kelp, via wild and farmed methods, is growing on average 6% year-on-year, further down the supply chain others are looking at alternative products algae can replace. Independent fashion designers are trialing replacing water-intensive cotton or problematic petrol-based polyester with fibers made from algae.

One such firm is Keel Labs in California, which uses wild kelp washed ashore from coastal storms. Out of this natural resource, it has patented a seaweed-based yarn called Kelsun, which harnesses a biopolymer in kelp to create a clean, biobased solution.

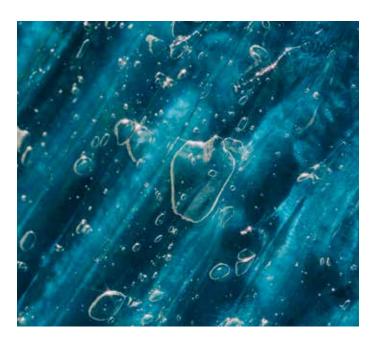
"Kelsun is currently being piloted by a select consortium of global brands. By the beginning of 2024, we will have announced a partnership with a well-known fashion label and have at least one publicly announced prototype," explained CEO and Co-founder Tessa Callaghan.

As a base textile that can be dyed, Kelsun could replace any number of toxic textiles at scale, which has been one of the challenges for finding replacements to petroleum-based cheap fibers. "Kelsun yarn was created as an alternative to natural and cellulosic fibers that are currently available on the market. Kelsun is a drop-in solution that can be used wherever yarns and textiles have an application. Most similar to cotton, our yarns are versatile and can be used across the fashion industry, in particular within the fields of accessories, garments, home furnishings, and beyond," she added.

Kelsun's global application, used like-for-like for cotton yet produced in a nontoxic manufacturing chain, shows just one of the incredible innovations and endless possibilities for this supercrop.

From changing farming to increasing biodiversity, creating yarns to create animal feed, innovation around algae is only just getting started. Being able to be scaled economically, a net positive for the environment and a creator of jobs, seaweed could be a simple solution to many of our global issues. Nature has the answers; all we have to do is look after it. \blacktriangleleft

Opposite: In British Columbia, Cascadia commercially seeds and farms sugar kelp to create seaweed-derived products for crop and cattle farmers Below (left): Kelsun yarn is a natural alternative to toxic petroleum-based fibers Below (right): California's Keel Labs has recently patented Kelsun, a seaweed based yarn





IMAGES left base @Cascadia Seaweed, right base @Rvan



VISIONS OF THE FUTURE

In this exclusive interview, we delve into the visionary mind of Marc Buckley, an ecological economist and regenerative futurist whose expertise has shaped the global conversation on sustainability. From writing the SDG Manifesto to pioneering the UNFCCC Resilience Frontiers foresight workshop for the Resilient Development Goals to spearheading other transformative initiatives within the United Nations, Buckley provides unparalleled insights into how cities can navigate the complex web of global challenges through the "New Triple Bottom Line"

As the author of the UN's Sustainable Development Goals (SDG) Manifesto, what can you tell us about the state of the world right now?

The Manifesto is a look at what the world would look like in December 2030 if we reach all the Sustainable Development Goals. I wrote that as a futurist, to give everybody a vision or a feeling after they read it. I believe in a future where we do things regeneratively with renewable energy in a much different way than we've ever seen before. But there are 8 billion people on the planet today. There are hundreds of thousands of births and deaths every single day. Our infrastructure, globally, is not up to speed.

I'll give you an example. To accommodate the early educational system, from kindergarten to third grade, we would need to build 66,000 classrooms every week. Today, we don't even build 100 per month. There's more than enough room for everybody; the thing that is lacking is governance and infrastructure. Sustainable

Development is infrastructure and provides good governance. We're not keeping pace with humanity or the evolution of civilization frameworks in order to realize the cities of the future.

Globally we are overshooting our ecological footprint each year. This year August 2, 2023 was Earth Overshoot day. When cities shift their models to sustainable development and include an infrastructure that can evolve to support each citizen with 1.6 replicable hectares equivalent of sustainable living then we will be keeping pace with the way the earth is evolving.

Almost 70% of the global population will live in cities by 2050. What do we need to change to bring our cities to a level that can support those people?

Governing bodies and institutions are stuck to the fossil fuel industry. They're stuck in the past. I'd call it the industrial age or, to poke a little fun,

even the dark ages because they're still working in a very old, outdated way. We didn't leave the stone age because we ran out of stones; we left it because it turns out there are more efficient ways of doing things.

All cities, villages, towns, and countries were built up around agriculture. Basically, agriculture domesticated us. Farming created a reason to stay put in one place, and we built up cities and communities because that's where the infrastructure was. But as cities became bigger and more industrialized, all the key resources and infrastructure were moved out into industrial spaces or into other cities with better resources or cheaper prices. When all the resources that make a city liveable, viable and flourishing are moved away from the people who are trying to live and work in those cities, things break down.

Of the 32 core civilization frameworks we've identified since early antiquity, all but five collapsed because of ecological or environmental reasons, the others due to disease, disruption or displacement. All 32 that collapsed

were also running a hierarchy model and it is the exact same hierarchical model we use today.

I'm not saying we should go back to tree-hugging or sitting around a campfire. I'm a regenerative solarpunk; I say let's use innovation to keep pace; find a way off fossil fuels, create cities that aren't traps for greenhouse gases, carbon traps or huge heat producers, and give citizens buy-in to their civilization framework. We fix the problem with our cities by altering the way we build up our infrastructures with future fit evolving development and by using the "New Triple Bottom Line."

Can you explain the "Triple Bottom Line?"

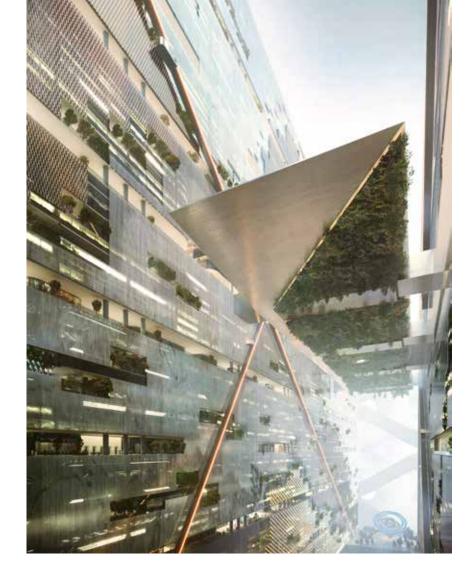
About 29 years ago, John Elkington [British author, advocate and entrepreneur dubbed the "Ambassador from the Future"] developed the "Triple Bottom Line" framework,

which was based around people, planet and profit. In 2018, he recalled it. He realized that, over and over again, organizations were greenwashing, using it as a single accounting principle. They were focusing on the profit aspect and forgetting about people and planet in the process.

Elkington recalled the original "Triple Bottom Line" openly and publicly in outlets like the Harvard Business Review, stating that it was no longer being used correctly. It was one of the first times that anything to do with sustainability had ever been recalled. Working with the Capital Institute, Regenerative Economist John Fullerton and Elkington's company Volans, others, he replaced it with the "New Triple Bottom Line," "Responsibility, Resilience and Regeneration" which can no longer be greenwashed as mere corporate social responsibility slogans.

These foundational pillars demand tangible action and verifiable progress. "Responsibility" now mandates that organizations not only acknowledge their ecological and social impact but also take proactive steps to minimize negative and maximize positive effects. "Resilience" calls for adaptive systems that can withstand and thrive amidst environmental, economic, and social upheavals. "Regeneration" goes beyond mere sustainability; it requires that our industries and economies operate in ways that restore and rejuvenate the ecosystems and communities they touch.

In essence, this evolved Triple Bottom Line is a clarion call for transformative change, embedding the health of the planet and its inhabitants into the core of every decision we make. The new version wasn't so politicized or publicized in the media, though; I still see reports from very large organizations that use the recalled "Triple Bottom Line." I don't think they got the memo.



How does embracing the "New Triple Bottom Line" help build a foundation for the future of our cities?

Let's start with responsibility. We need organizations and institutes that are responsible not only for the human beings they employ and not only for the planet but also for what they do in this world. They should leave the planet better than they found it. Whatever they do or touch in this world should be done with responsibility.

The second aspect is resilience. It doesn't matter how much sustainability you have; in one hour, a natural disaster could come and wipe out 100% of it. We need to build desirable, resilient futures. I don't mean dystopian resilience, where humanity survives but it's miserable outside. I mean resilient infrastructures that provide renewable

energy, clean water and sanitation, and organic food regardless of what happens. Resilience that doesn't hurt our planet, our finite resources or our human health.

Lastly, regeneration means creating the conditions for flourishing life, the abundant conditions that regenerate our supply chains and our natural environments. When we cut down trees or when we take finite resources, we should do it in such a way that the planet can regenerate before we need those resources again. It's an abundant way to look at the world; humans and organizations are constantly in this symbiotic relationship. We must leave the world better than we found it.

You've talked in the past about humanity's need to move toward the Symbiocene era, as posited by Glenn Albrecht in 2011. How can cities—and humanity—go about achieving symbiosis?

Luckily, embracing our symbiotic relationship with the planet is not only a way to have enough clean air, clean water, sanitation and renewable energy; it's also a better business model. Symbiosis is an ecological phenomenon and the fastest form of human evolution. When human beings interact with all the other symbiont parts of the world, their organizations or their neighborhoods, when they get involved in the exchange with their area, they evolve.

So, when we build up cities or civilizations, or when they grow in population, we need to make sure that that infrastructure is always keeping pace. Not only in terms of population growth but in relation to the latest technologies, too. I live in Hamburg; it's modern and developed, but the infrastructure is probably about 15 to 20 years in the past; it's not keeping pace with the world's future transition.

You've written the liveability thesis for ecological civilization projects like NEOM in Saudi Arabia; do you think such projects could be a chance to test modern city systems?

I think that NEOM is great, but this is life. There is no test. We must create not only the future of work but the future of our cities the way things work. A city is an organism: it's living, it's breathing, it supports itself. Technology can play its part in helping us get out of bad systems or errors of the past, but you can't pilot or test life because, in that process, people die. People suffer. We need to just do it, enter this symbiotic relationship and realize that all we do is guided by the principle of being net positive.

So, do you feel that traditional bureaucracy is holding future-thinking cities back?



Left: Located on the Arabian Peninsula, Trojena NEOM is an outdoor skiing destination, projected to house over 7000 permanent residents and attract u

Opposite: NEOM is expected to revolutionize urban living in Sau

40 · Advantage Vol21 2023

I was in Songdo, South Korea, as part of the Resilience Frontiers program. Songdo used to be modeled as the city of the future. When I went there, it was all built around big roads and cars. It was soulless, a ghost town. They tried to build a technologically advanced city of the future, but they failed miserably. The entire city is built around four to five-lane roads and cars. There are a few green areas and parks; there's a lot of concrete, a lot of heat zones, all sorts of problems. It was not built to work in harmony with nature and with the way humans live and work.

Similarly, BedZED in the U.K. was and is a great place, a small community built for walking and biking. But when they were first building it up, the local zoning commission mandated that they include a certain number of parking spaces—in a village specifically built to be car-free. That's the current state of building a city or community of the future: outdated permitting and governance processes. And we see that all around the world.

Are any organizations getting it right?

The SDG city in Copenhagen is fabulous. They're developing a lot of things and want to be the first carbonneutral city. Another city close by, Lolland, is run on 100% renewable energy and is striving toward net zero. I have to caveat that, though. Net zero and carbon neutral are fallacies. They basically mean you're flatlining. We're carbon beings and we need carbon, but we need to be net positive and use the regenerative circular process to create more oxygen, capture more carbon and leave the world better.

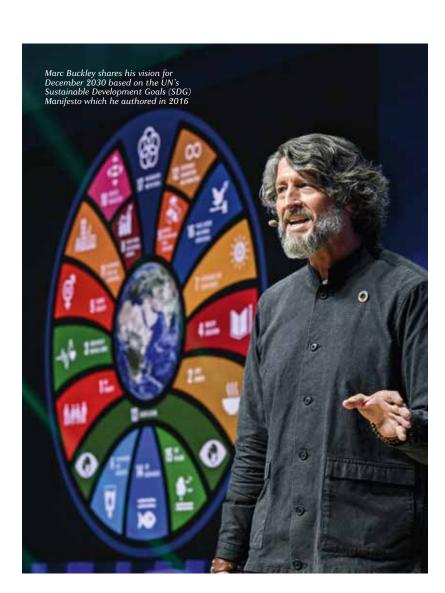
It's not a city, but I should also mention the European Union. It's the biggest organization moving the bar forward on the environment and sustainability right now through the Environmental Social Governance taxonomy, the Corporate

Sustainability Reporting Directive, the Human Rights Due Diligence Directive, and the Digital Product Passport. When I was at EarthX in Dallas, Texas, I heard a lot of people saying the EU's directives are "woke" or threatening to take them to court. That's fine! Stay and do your business locally because, in that process, you'll avoid the global supply chain and be sustainable. Of course, in the real world, it's virtually impossible not to work with Europe. Instead of complaining about having to reach a bar that was already set low, shoot beyond it. Set it higher. Guess what? You'll be well placed to be future fit as an organization. That is the real big game-changer.

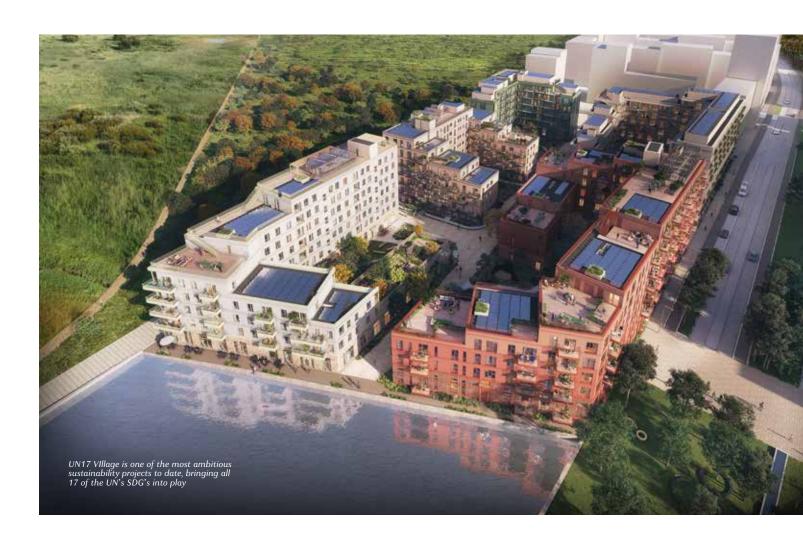
What's your long-term vision? How can the world accelerate its transition to the future?

People hear that I'm into sustainability and the environment and they think I'm a hippy. I'm a regenerative futurist, and I know that for any business, organization or government to be truly sustainable, they need to thoroughly understand three core principles.

You need to know economics inside out and how to play well with them, picking out the models that will make your business future fit and likely to thrive well into the coming years. The second pillar is innovation—impact innovations for purpose that transform. We've never moved from one age to another or had a







transformation without impact. I don't just mean a new delivery app or something like ChatGPT; I mean true innovations that solve humanity's problems and our global grand challenges. Third, Futures with all the tools used like foresight and three horizons. If you don't know what Regenerative Futures or the world looks like in the future, how will you ever get there? Whenever humanity has set a vision of what we want to achieve, we've found the path to get there no matter what.

At the World Government Summit in February 2023, I conducted an intensive multi-day workshop with 120 governments to set the roadmap for the future of governance in order for them to get the vision and become future fit. And that's how we do things moving forward. We discover, together, how to use the core principles of sustainability to break the paradigm and create models that really, truly work instead of sticking with siloed, linear or class-restricted models that divide humanity from one another.

KEY RECOMMENDATIONS FROM MARC BUCKLEY

"1000+ Solutions" by Dr. Bertrand Piccard, Chairman of the Solar Impulse Foundation

"Dr. Piccard is a super person who's supporting innovators and helping to really highlight potential solutions for cities. He thinks about doing things differently and creating new systems—innovations that don't harm people or planet while remaining economically viable options."

"Earth for All: A Survival Guide for Humanity" by Johan Rockström, Sandrine Dixson-Declève et al.

"This book by the Club of Rome brings together five economic models: donut economics, well-being economics, post-growth economics, planetary boundaries and the Club of Rome systems dynamic model, and suggests that the question isn't which economic model we should use but whether you should use them all."

"Cradle to Cradle: Remaking the Way We Make Things" by William McDonough and Michael Braungart

"William McDonough is the father of the circular economy and an architect of sustainability. He's uniquely placed to give advice on using things the right way and on keeping carbon in balance."

Marc's video and audio podcast, "Inside Ideas with Marc Buckley," is available on YouTube, Spotify or Apple Podcasts. Find out more about Marc's mission at marcbuckley, earth

STRAIGHT DOWN THE LINE

An avid tennis player and alumnus from one of the top aeronautical schools in the country, Keith Alvares discusses his journey from Embry-Riddle University to Embraer and how he navigated a career path from flight testing to Manufacturing Engineer Supervisor

A native of Qatar in the Middle East, Keith Alvares grew up around planes and helicopters his entire life. He was introduced to aviation at a young age by his mother, who worked for a helicopter airline, and other close family members who were pilots. Alvares applied to 10 universities after completing his high school education in Qatar. Embry-Riddle Aeronautical University was always his top choice, so it was like a dream come true when he received his acceptance notice and early admission.

As a student, Alvares made the most of his university experience at Embry Riddle. He achieved a Bachelor's Degree in Aerospace Engineering, his commercial pilot's license, and an Airframe and Powerplant license. One of his favorite memories at Embry-Riddle was working at the College of Engineering.

He started in the aerospace engineering department and then worked for the dean of the College of Engineering upon graduation. He attributes much of his personal growth to the friends and mentors he developed during that time.

The summer after graduation, he received a call from some colleagues he went to school with who worked at Embraer, and they recommended him for a position within the company. During the initial interview, he expressed his desire to work in flight test when asked what else he would want to do at Embraer. His dream had always been to get into flight testing, and it served as a motivating factor for getting his engineering degree and pilot's license. A few months after he joined the company as a product development engineer, the opportunity



Keith Alvares at the last Production flight of 2021 with Capt. Eugenio Cara

presented itself to join the flight test team, and he took it. As a flight test engineer, he tested production requirements and met certification specifications to ensure the planes were fit to deliver. Alvares further explained: "This includes but is not limited to inflight engine shut-downs and stall maneuvers. We take it to the edge of the operational envelope to certify that everything does what it is designed to do."

After three years as a flight test engineer, he saw an opportunity to lead the manufacturing engineering team as a journey supervisor. During his time as a flight test engineer, he worked closely with this team, but there were still some hurdles to overcome. "Learning the final assembly was challenging because it is the beginning phase, an area I wasn't familiar with. Most of my experience has been closer to the end of the line where the aircraft is already built. Now, in my role, I get to see from wing mate to the fuselage, all the way to delivery for the customer. It's nice that I'm at the beginning and the end of the product line."

When asked about the qualities necessary to succeed in this role, Alvares listed negotiation, patience, and the ability to be a good listener. "As a manufacturing engineer supervisor, you have to have the ability to bring multiple areas together. You are a coordinator and someone who liaisons between multiple areas to identify solutions. We are kind of like middlemen between all the areas." At present, he supports three areas on the manufacturing engineering team: final assembly for the Phenom 100 and 300, flight prep areas for all Phenom and Praetor products, and the support of all delivery centers from the engineering side.

When not working, Alvares can be found on the tennis court. A long-time player since age five, he put the racket down during college but picked it up again once he stared at Embraer. When he first moved to the new campus, he joined a few tennis clubs because he didn't know anyone, and it turned out to be a good tool for networking his way into the flight-test engineering position. "One of the test pilots is a big tennis player, so it was on the tennis court that I told someone I was interested in doing flight testing, and they made the introduction."

Some of Alvares' long-term goals include management consulting and maybe even COO, but for now, aircraft delivery is one of the most fulfilling aspects of his job. "I love the customers' reaction the first time they see their plane and the satisfaction on their faces when at the end of their first flight. It's priceless and fills me with the pride of a job well done." ◀



"I get to see from wing mate to the fuselage, all the way to delivery for the customer. It's nice that I'm at the beginning and the end of the product line."

MONOCHROMATIC

Focusing on architecture, graphic elements and line work, Nina Papiorek's images strike an impressive balance between fine art and street and urban landscape photography

Without exception, Nina Papiorek's photographs are black and white. For the past 20 years, her work has featured a single person lost in an urban setting. "Our environment and our lives are characterized by unrest; individuals often seem lost, caught in thought or even lonely. This contrast has always fascinated me," German-born Papiorek explained.

The multi-award-winning creative describes her work as architecture-based fine art street photography, and she's meticulous about editing and tonal value, relying on Fujifilm equipment. "Black and white underlines the minimalistic way I try to photograph with fewer distractions," she noted, adding that the lack of color comes down to personal taste.

To capture urban scenes, Papiorek pursues "the perfect light and at the perfect moment, with the perfect position and posture of a person," noting that it takes time and patience. Papiorek finds inspiration in new locations and spaces as she eyes out metropolises to photograph like Bangkok and Tokyo next. "I don't have a favorite city or location. I like to find new perspectives on often-seen buildings or motifs," she said.

Papiorek is the Co-founder of the Düsseldorf-based "dorfcollective" and has authored several online photography courses. Backed by an extensive portfolio of print publications worldwide, Papiorek's work will be shown as part of "7 Spaces," a Women's Street Photography Exhibition in Hamburg, Germany, this December. ninapapiorek.com

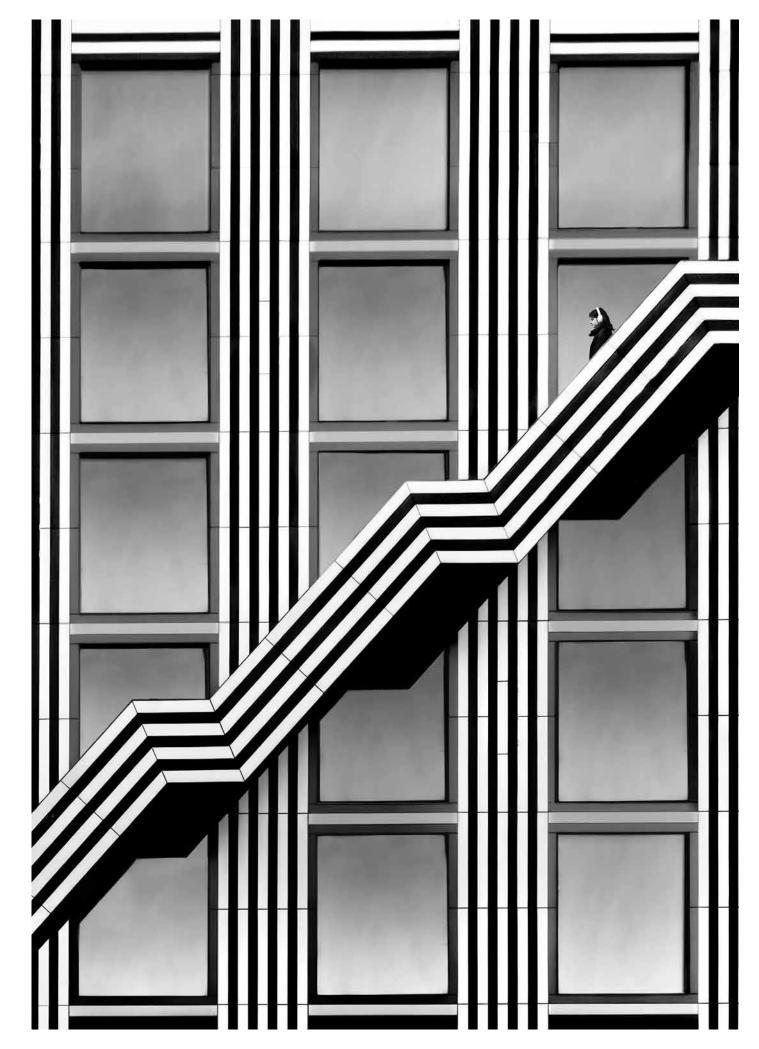




Above: Lisbon, Portugal Opposite: Berlin, Germany

"I like to find new perspectives on often-seen buildings or motifs. I always try to give my pictures a new dimension with my perspective and form of representation."







Opposite: Amsterdam, Netherlands Left: Tazacorte, la Palma Island Below: Valencia, Spain



50 · Advantage Vol21 2023

THE RISE OF FLOATING CITIES

The future of coastal cities may lie in developing offshore floating structures that are agile enough to respond quickly to the changing climate and what inhabitants need

ithin the next century, sea-level rise is expected to top 3.6 feet, affecting more than 500 coastal cities across the world. Many, such as Miami and Bangkok, already experience regular flooding. Floating structures, whether individual houses or entire cities, have become a source of positive news in the midst of climate anxiety.

Floating structures enable those on vulnerable coasts to move from being "climate refugees to climate innovators," as Maldives Floating City puts it. Onwater projects are not only floodproof; they offer a clean slate on which to design modular, moving or adaptable urban centers suitable for modern life and to instigate biodiversity regeneration. They are also sustainably innovative as they harness renewable energy and pioneering farming and circular systems, allowing millions of residents to stay in place rather than being forced to retreat elsewhere.

But, encouragingly, specialist architects want to use floating structures to solve more problems than just climate change. One such project is Oceanix, an entire floating city prototype off the coast of South Korea. It will cover 17 acres and be ready for its up to 100,000 inhabitants in 2028. It breaks down into a lodging platform for organic dining and leisure, a living platform engineered to foster communities and a research hub that will spearhead techniques like hydroponic vertical farming.

"Floating cities are not about technology. Ultimately, we are building a thriving community of people who care about the planet and every life form on it. We believe humanity can live in harmony with life below water. It is not a question of one versus the other. We are building the future of how people can organize themselves into creative, healthy and flourishing communities while regenerating marine ecosystems," said Itai Madamombe, Co-founder and CEO at Oceanix.

In addition to being more resilient to rising sea levels over the next century, floating developments tend to have a smaller carbon footprint. This is because they are harnessing the latest circular and regenerative techniques in virgin space, so they are unencumbered by legacy infrastructure.

"Oceanix reduces the carbon footprint by five times to the same project built on land. Oceanix thrives on circular systems that integrate water, waste and energy resources. These system linkages balance the constraints of space, technology, and natural processes to optimize supply and demand," explained Madamombe.





To the southwest, WaterStudio, which has been designing floating structures for 20 years, is delivering Maldives Floating City. This car-free floating city (the world's first) is based on a traditional boating community and will offer a sea-level-rise-proof urban development, while at the same time improving overcrowded capital Malé by creating more mixed-use living space. The first homes are already afloat and will be joined by hotels, restaurants, boutiques, and a world-class marina across 494 acres within a lagoon.

"Our goal is to improve the ecosystem for each location," said Koen Olthuis, CEO at WaterStudio. Maldives Floating City has a hexagonal design pattern, inspired by brain coral, which enables more light to hit the seabed. At the same time it creates shade for the blue habitat beneath, which is increasingly important for marine life in warming seas. The design also increases the circumference of the city, creating space for more artificial coral reefs, which will be planted as the city grows.

While city-scale projects are taking years to complete, there has been a flurry of smaller innovative floating architecture that serves the public, especially in Scandinavia. For instance, MAST's floating park in "Floating cities are not about technology. Ultimately, we are building a thriving community of people who care about the planet and every life form on it."



Copenhagen is made up of modular, movable pods. And Kvorning Design's futuristic exhibition pavilion, Salmon Eye, floats in the middle of a Norwegian fjord. Made of metal yet built in a shipyard, the exhibition space reflects its purpose: to teach visitors about the aquaculture industry in Norway.

"We believe that housing or other kinds of constructions made for living on water should have an organic design inspired by nature," explained Arne Kvorning, CEO at Kvorning Design. "At the same time, it should pay respect to its surroundings, like Salmon Eye, that reflects the colors of the sea and the sky due to the mirror effect of its stainless steel surface."

As CNN said in July this year, "Floating architecture isn't the future, it's already here." Each month brings news of more audacious and inventive projects on water as technological barriers are overcome. MAST's latest project will be to turn a Milan quarry into a floating mixed-use park, while the first floating residential street, Nassauhaven, has opened in Rotterdam, which lies 90% below sea level.

WaterStudio's CEO agreed: "Everyone can make floating structures now, but we need to look at how to use this to make smart cities that are more flexible. Cities used to be static and stay in place for centuries, but we want to enable them to start moving and adjust to the needs of the population. Floating cities can respond more quickly to societal change as well

as environmental. I want to use floating cities to revitalize city centers, to provide affordable housing that can change and move as parts of a city boom and bust. The projects can be towed, moved and adapted as the decades go by."

This commitment to providing affordable housing is demonstrated by Maldives Floating City, where the properties are designed to remain attainable for local residents, and environmental commitments include renewable energy and walkable and bikeable districts. Communities will have space to flourish, combining high-tech design with a low-tech approach to daily life

"We could go back to nomadic cities that move up and down a river like ancient Bangkok, which was mostly based on boats. Modern Jakarta, for instance, is moving their entire capital because of rising sea levels," said Olthuis at WaterStudio.

Our future cities need to be living organisms that evolve, move and adapt to a range of challenges; freeing them of static land might be a positive first step. The future, it would seem, is out there on our horizons. \blacktriangleleft

Opposite (top): Off the coast of South Korea, prototype Oceanix reveals an entire floating city designed to house 100,000 inhabitants

Opposite (bottom): In Coppenhagen, MAST's floating park is features modual, movable pods

Right: WaterStudio's Maldives Floating City is a sea-levelrise-proof urban development stretching across 494 acres



FROM WORK TO REST IN A PINCH

The Praetor 500 and Praetor 600 cabin spaces were considerately designed to deliver maximum utility, whether for work or play

In the latest "Beyond the Wings" video on Youtube, which debuted this quarter, Embraer showcases the flexible utility of the Praetor 500 and Praetor 600 cabin spaces. The world's most disruptive and technologically advanced midsize and super-midsize jets are capable of continent- and ocean-spanning missions, respectively, making it all the more important to be able to sleep, work or play during long flights.

Work smarter, not harder

What is the biggest killer of productivity when traveling? It's a trick question. There are two. Jet lag and a bad internet connection. Fortunately, the Praetor 500 and Praetor 600 tackle both these issues head-on. Best-inclass cabin pressurization ensures

that even while flying at 45,000 feet, inside the cabin it will feel like 5,800 feet. This feature greatly reduces the feeling of fatigue or jet lag, making it easier to continue being productive after a flight. And slow internet? Not an issue onboard the aircraft with fast, home-like connectivity provided by Ka-band.

Get your beauty rest

Nothing feels better than being able to get a good night's rest on a flight. Thanks to several interior innovations, passengers onboard the Praetor family of aircraft will have no problem doing just that. The ultra-quiet environment, enabled by innovative engineering and design such as placing the emergency exit in the lavatory, is ideal for catching

some z's. And benefiting from the incredible engineering capabilities at Embraer, up to four passengers can sleep at once on fully flat, seven-footlong, berthing beds on the Praetor 600, and two passengers at once on the Praetor 500. The seats easily transition to beds by quick removal the headrest, a 180-degree rotation, and then a recline of the seat's back until two seats converge to create a single bed.

Whatever a passenger's in-flight needs may be, Embraer's Praetor family of jets are ready to deliver the ultimate experience in business aviation.





Scan the QR code to watch the latest Beyond the Wing's video showcasing the workto-rest transformation capable onboard the Praetor 500.





he world's first private resort collection, ÀNI, references the Swahili "andjani" for "journey ahead," promising unparalleled getaways in the most remote and stunning corners of our planet, designed to initiate transformation for guests and the local communities surrounding them.

ÀNI Private Resorts is established on a remote Thailand island called Koh Yao Noi, a secluded Dominican Republic peninsula, a five-acre estate on Sri Lanka's southern coast and on the cliffs of Anguilla. There also is a new property also under contstruction on Anguilla's Shoal Bay East. Each location accommodates a single group of 20 to 30 people in 10 to 15 suites. Amenities and activities are tailored to their requests, with a dedicated staff almost equal in number taking care of every need, from personalized gastronomic delights and spa indulgences to children's activities and immersive cultural engagements.

"I'd say I have three goals for choosing locations. I want to find extraordinary land, such as a very isolated beach or somewhere off the beaten track, remote enough to ensure guests' privacy and where I can

positively impact the local community." Proprietor, philanthropist and art patron Tim Reynolds has realized his dream, offering guests private luxury travel destinations like no other and channeling profits into establishing an ANI Art Academy at every location. By providing free art education to students in the area, he fills that educational opportunity void common to developing nations and gives them a chance to fulfill the dream of creating a sustainable livelihood through their own creative talent.

In addition to these efforts, two art academies were established in Pennsylvania and New Jersey in the U.S. The latter caters to disabled veterans. Reynolds noted, "I learned to paint after an accident over two decades ago. It's an avenue that individuals with injuries can explore. It's not art therapy but can offer a meditative experience."

Reynolds calls it "the art of giving back." "Even in luxury private travel, each guest can make a difference in the local communities' lives. Honestly, my goal in life is to create permanent memories. Every day that I do anything and think, 'I'll never forget that; that was cool'—that's the jackpot and what we're going for."



Opposite: ÀNI Dominican Republic is an exclusive use orivate resort located on a secluded peninsula

eft: Mentored by ÀNI cademy's Dean, art oprentices develop their vn creative voice

EMBRAER TIP

Fly to the Caribbean in the **Phenom 300E**with best-in-class speed, range and
uncompromising comfort, and support the
ÀNI Art Academies by staying at one of the
ÀNI Resorts in Anguilla or the Dominican
Republic.

ÀNI sponsors education, daily meals, art easels, supplies and canvases for students, known as apprentices, and, on Koh Yao Noi Island, accommodation as well. Before ÀNI apprentices even pick up a pencil, they are taught the discipline of how to set up and care for their tools, their easels and their space. Apprentices start learning fundamentals like holding a pencil and correctly drawing a straight line. They progress to perfecting the execution of spheres, cones, cubes and other shapes and understanding the principles of light, draftsmanship and visual perception. The desired level of competency can take years to achieve and is critical to creating fine art to the level of excellence for which ÀNI Academies are known.

Apprentices are encouraged to develop their own creative voice, evolving a subject or visual format to tell the story they want to tell. Each is mentored individually by the Academy's Dean. "When students of ÀNI Art Academies graduate, the goal is to have a full toolbox of skills. They can paint anything from photorealism to abstract painting, as their artistic development has been supported through learning," said Reynolds.

Anyone can apply for a spot if they can demonstrate the required motivation and intent to succeed. Reynolds believes that skills in painting can be learned in the same way that mathematics and history prowess can be achieved. There is space for up to 50 students in Thailand, Sri Lanka and the Dominican Republic, and 25 in Anguilla. Students sit together, whatever stage they are at, so the more advanced learners can inspire beginners. They are introduced to international art gallerists and dealers after completing their training.







Top: ÀNI Thailand is a private beachfront oasis on Koh Yao Noi Island

Bottom: In Sri Lanka, bespoke guest experiences include gastronomic delights, spa indulgences and immersive cultural engagements Middle: ÀNI Sri Lanka accommodates six to 30 guests in two living Salas overlooking the Indian Ocean Through ANI Art Academies, students from the local region are provided with free art education and the chance to create a sustainable livelihood



Guests learn about the ANI Art Academies when the resort general manager contacts them to create their bespoke itinerary. Often, they want to visit the schools, which are set on pretty campuses and are well-landscaped with pavilions from which they can admire the scenery while the art is being created. "That's where a lot of the art gets sold. We also do sketch sessions where some students come over with a professional musician. It's really fun," said Reynolds. Each resort showcases artworks created by the students, and guests can commission personalized pieces. The apprentices even have the chance to sell their work before the program's conclusion, enabling them to generate income while still in training. The program is tailored to their pace, spanning up to three years.

Expanding its scope further, ÀNI Private Resorts is now committing to supporting existing primary and high schools and establishing new education computer centers near its properties in Thailand, Sri Lanka and Anguilla. In the Dominican Republic, locals can enroll for free at the ÀNI English School.

At the heart of its resort offering is ÀNI's most heartfelt investment—its staff, the very soul of the brand. Also benefiting from language and skills training, they are treated as family, an honor extended to the guests in their care who never forget the personal touch that differentiates every ÀNI stay.

When Reynolds started this initiative, he felt that placing some of the strongest artistic training in the hands of emerging artists around the world would give rise to a generation of creatives capable of contributing exciting new ideas, sharing robust cultures and pioneering new means of connection and communication. While this vision has been realized, Reynolds insists that "the success of ÀNI Art Academies is not measured by revenues; rather it is, and will continue to be, measured by how many people this program has touched." ◀

IMAGES left page ©ÀNI Private Resorts, right page ©ÀNI Art Academies



What inspired your vision to impact multiple communities and countries through art? And why were these specific locations the starting points?

I took some time off between building my career and business school and worked as a bartender at the Club Med Resort in Turks and Caicos. I was there for about eight months, and the experience left a powerful impression. It's where I met my wife, and I just loved the natural beauty and serenity of the islands.

I wrote my wife a letter outlining my life plan when I left. I described how I wanted to finish business school, work to make enough money to retire young and move to the Caribbean, where I would build some schools and live as a writer. Looking back 26 or so years later, a lot of that life plan happened, albeit slightly differently. The schools became art schools—ÄNI Art Academies—and I became an artist instead of a writer. I couldn't tell you the first time I woke up and

said, "When I grow up, I want to build schools in developing countries and resorts to support them." It was a wish that I set my sights on and worked toward.

Where does your passion or interest in art come from? What benefits do you find in creating and developing skills as a painter and art patron?

The art element came to me later in life. I wasn't artistic as a child and didn't know how to paint—but no one does. Nobody teaches you how to paint; it's an almost unknowable skill. I'm talking about the more classical, disciplined methods of painting. Abstract painting allows you to follow your spirit and do whatever you want, but traditional techniques require highly honed and trained skills. I was always interested in Irving Stone's argument that Michelangelo and Van Gogh were more hardworking

achievers than born geniuses. This sparked the idea that individuals without other opportunities could become artists through education, benefiting themselves and their communities.

After my accident, I decided to learn how to paint. During my training, I met with a young artist, Timothy Jahn. He was studying with Anthony Waichulis, whose highly successful curriculum promotes creative freedom through logic and discipline. I also trained with Anthony for four years before asking him to partner with me and establish the ÀNI Art Academies utilizing the Waichulis training system.

What do you hope to accomplish through your philanthropy? Why are these programs important to you and your guests (in the context of ESG and regenerative travel)?

Zero impact has zero effect. ÀNI is about positive impact, which requires more effort and funds. The virtuous circle we're building of five-star resorts, great academies and English and computer science schools in one location will create amazing tourist communities and local comradery. We hope to impact several communities significantly by delivering skills that complement each other.

How do you select the students to participate in the art program?

Anyone can apply. What we are looking for is motivation and determination to succeed. The students are invited for a test day to see how they adapt to being in the studio. The toughest side of learning is having the patience to sit in a chair for up to eight hours a day, repeating many exercises until they are perfect. Watching these young adults work hard and see what they achieve is magic. \triangleleft

Right: Each resort showcases artworks created by the apprentices, enabling them to generate income while in training



"The success of ANI Art Academies is not measured by revenues; rather it is, and will continue to be, measured by how many people this program has touched."

62 · Advantage Vol21 2023

MACECIOFF MACO NI Deirota Docorto vietto mora ONI Art Annamica

TOOLS OF THE TRADE

The Embraer Foundation is committed to developing a more resilient and sustainable aviation workforce by including rural communities in the need to bring more students into the aviation industry regardless of their geographic location

In West Virginia and across the U.S., rural communities are changing as young people no longer have to relocate to urban areas for better jobs. Remote work and the introduction of opportunities like the Aviation Maintenance Technology (AMT) program at Marshall University have created new employment pathways for students throughout the Huntington, West Virginia and Tri-State area.

As part of its Educational Partnership Program (EPP), the Embraer Foundation has been diligently working with educational institutions nationwide to remove barriers to entry for students interested in the aerospace field. Embraer was the first donor to provide a grant for Marshall University's AMT program, and those funds provide toolkits for students to use in their coursework. "Marshall University's aim to remove financial barriers for students who are at an economic disadvantage aligns with Embraer's mission to introduce more students, no matter their background, to career opportunities within aviation. Embraer is delighted to contribute to the Marshall University AMT program," said Monica Newman McCluney, Head of U.S. Corporate Social Responsibility and the Embraer Foundation. As essential as textbooks, toolkits for AMTs can run in the thousands of dollars, and while second hand tools are affordable, they are less reliable and often impede progress. Recognizing the impact on student learning outcomes, Program Director Jim Smith acknowledges and appreciates the support: "Embraer's generous donation has allowed

us to provide the tools the team needs for success in the program. Many programs require students to purchase their own tools, thus creating financial barriers to entry. With Embraer's donation, that financial barrier to entry can be removed to assist disadvantaged students."

The first of its kind in the region, the new AMT program offers a joint Associate of Applied Science degree from Marshall University and Mountwest Community and Technical College, in addition to FAA certification and numerous micro-credentials. Bill Noe, Dean of the Aviation Program, explains the effect on the economy: "The program's introduction can bring a significant uptick to the regional economy—in fact, it's likely to generate numerous economic benefits, including job creation directly and indirectly related to the program." By training skilled professionals locally, the region can attract aviation businesses seeking an experienced and knowledgeable workforce, further enhancing economic development and transforming the area's footprint.

Another essential aspect of the program experience is ensuring that team members receive comprehensive, hands-on training that fully prepares them for real-world challenges in the aviation industry. According to Bill, this type of training is vital for producing skilled professionals who can uphold and exceed industry standards. "I also stress the importance of curiosity and a commitment to lifelong learning,





"The program's introduction can bring a significant uptick to the regional economy" especially in a rapidly evolving industry like aviation. New technologies, regulations and challenges emerge regularly, so it's vital for professionals to stay informed."

University President Brad D. Smith expressed his pleasure with program outcomes thus far: "Marshall's aviation program has seen unparalleled success in the initial years of operation. Much of that success is attributable to partners like Embraer, who saw the potential for innovation and growth and partnered with us to build an outstanding program. We are inspired by the culture and standard of excellence the Embraer organization exhibits each day, and we are grateful for their generous support."

Nationwide, the demand for skilled labor in aviation is rising, with occupational projections indicating a deficit of over 40,000 aircraft maintenance workers through 2027. By offering high-quality educational opportunities to residents, the program seeks to put a dent in that number, provide a new outlet for employment in the area, and offer the chance to pursue a rewarding career without having to relocate. As the airline industry grows, the new cutting-edge Aviation Maintenance Technology program at Marshall University will ensure local graduates remain in high demand as essential employees. ◀

Bolstering the future of aerospace through the new Aviation Maintenan Technology program at Marshall University



64 · Advantage Vol21 2023





MILA Omakase is a 10-seat chef's counter that serves just 40 guests over two nights in Miami

CULINARY GENIUS

Collaborative pop-ups are a growing trend among the world's top chefs, enticing diners to flock to intimate culinary scenes that promise creativity and delicious experimentation

oma started it with pop-ups in Tokyo, Tulum and, most recently, Kyoto, creating an ephemeral fine dining experience as well as a sense of urgency in inspiring new destinations. Post-pandemic, collaboration dinners bringing together the world's top chefs seem to be more popular than ever, attracting jet-setting diners from around the globe.

Miami's trendy Riviera Dining Group (RDG) regularly hosts world-renowned chefs like Dominique Crenn and Manu Buffara at MILA Omakase, its 10-seat chef's counter that serves just 40 guests over two nights. These are the most coveted reservations in a city with a newly booming culinary scene.

For RDG's Head of Culinary and Partner, Michaël Michaelidis, who was previously culinary director of Joël Robuchon Group in Tokyo, hosting chefs from around the world sparks his creativity.

"There's an exchange between chefs," he said. "You learn new techniques, and it's important for a chef to have a growing mind and not stay in your routine

but be open to new ideas." For example, Buffara brought sour mango, Brazil nut gremolata and tucupi sauce from Brazil which are all new ingredients for Michaelidis. He was inspired by Brazil's national drink, the caipirinha, to create a refreshing dessert with cahaça granita, coconut panna cotta and lime mousse.

Cooking in an unfamiliar kitchen also presents very real challenges. There may be unexpected variables with equipment or ingredient availability that necessitate last-minute improvisation. "Collabs are always complicated because you're in a different environment," said Aitor Zabala, who is getting ready to reopen his restaurant Somni in Los Angeles. He was one of four visiting chefs, including Christopher Kostow, Aisha Ibrahim and Leandro Carreira, cooking at ōkta in Oregon's Willamette Valley for a one-night-only summer solstice dinner. "Right now is an incubation time waiting to open, so it's good for me to stay active at events like this."

Hosting Chef Matthew Lightner wanted the visiting chefs to be able to explore McMinnville and the

fs to be able to explore McMinnville and th

Willamette Valley, so he planned a second "Solstice in the Field" event the following day at ōkta's regenerative farm, where all of the guest chefs could enjoy food and wine by local chefs and producers.

"We don't want it to be too stressful," Lightner said. "We're bringing these chefs here to engage with the community, and the idea was to give everyone a day to enjoy the local food." With five chefs in the kitchen, it would be easy to run into a too-many-cooks-type situation, but the 11-course dinner at ōkta went off without a hitch. The menu flowed nicely, showing off local seafood like razor clam, geoduck and black cod from the Oregon coast, with a few local ingredients like kohlrabi and hazelnuts interpreted in a couple different ways throughout, creating a sense of cohesion without feeling redundant.

With just one seating for 36, the chefs were able to interact with diners, presenting some of their own dishes and sharing their personal stories. This kind of high-touch dining experience is what diners crave and expect at exclusive events with high price tags.

At Fairmont Pacific Rim in Vancouver, Chef Hector Laguna and the team at Botanist host visiting chefs and mixologists from around the world several times a year, including Chef James Kent of SAGA in New York and Chef David Barzelay of Lazy Bear in San Francisco this past year. The guest chefs certainly enjoy some time relaxing at the city's most luxurious and modern hotel, and these dinners have become a big draw for sophisticated Vancouver locals who relish the opportunity to experience world-class international restaurants without leaving town.

"It's vital to establish some level of a working relationship before the visiting chef or bartender arrives in Vancouver," Laguna explained. "We love to discuss ideas and menu concepts and which ingredients are in season in the Pacific Northwest a few months in advance, which sets the tone for how we'll collaborate together in the kitchen. We always make a point to ensure the visiting team has time in Vancouver before or after the collaboration, and we love to act as tour guides for our beautiful city—it really builds on our bond."



Opposite: At Fairmont Pacific Rim in Vancouver, Botanist hosts chefs and mixologists from around the world, including Lazy Bear's Chef, David Barzelay

Top: Chefs Aitor Zabala, Christopher Kostow, Aisha Ibrahim and Leandro Carreira, cooking at õkta in Oregon's Willamette Valley

Below (left): Visiting chefs at ökta restaurant collaborate to learn new techniques and create new culinary offerings

Below (right): Held at ökta restaurant, the Guest Chef Dinner brought together four visiting chefs for a one-night-

← EMBRAER TIP

Enjoy access to the epicurean delights of chef collaborations on both U.S. coasts in the **Praetor 500**, which provides unprecedented comfort on nonstop continental flights.



2024 EVENTS FOR YOUR CALENDAR

Cayman Cookout – January 10-15

Eric Ripert invites several chef friends to join him at The Ritz-Carlton Grand Cayman each January for an epic week of feasting culminating in a multi-course gala dinner. This year, spearfish for lionfish with José Andrés and play pétanque while enjoying bites from chefs like Kristen Kish and Enrique Olvera. caymancookout.com

l'abeille x La Clairière – February 13-14

Chefs Mitsunobu Nagae and Hideyuki Shibata share a reverence for Japanese ingredients and classical French culinary techniques. For this collaboration, Tokyo's Shibata joins Nagae at his Tribeca restaurant l'abeille for a brilliant showcase of sashimi-grade winter fish from Japan, truffles, root vegetables and more, all prepared with subtle, sophisticated Japanese tastes. *labeille.nyc*

A Forbes Five Star Feast – March 8

Charleston Wine + Food's most exclusive event is a Southern celebration bringing together two renowned North and South Carolina Forbes five-star restaurants. Chefs Steven Greene from The Umstead and Steven Brooks of The Ocean Room at Kiawah Island Golf Resort serve heirloom vegetables, poached oysters and more, paired with exclusive bottles from Kiawah's wine library. charlestonwineandfood.com

Barzelay debuted a new dessert during the Botanist collaboration that he'd served numerous times at small dinners in private homes, but never during a restaurant service. His figs foster dessert was inspired by bananas foster—à la minute flambé, but with figs and served with fig leaf cream. Botanist's Pastry Chef, Kate Siegel, suggested incorporating goat's cheese into the ice cream, which added a contrasting tangy flavor to the sweet, juicy figs.

"This kind of collaboration is about forging connections, seeing what other chefs are doing, and making friends," Barzelay said. "It also creates opportunities for your cooks to learn and also to exchange stages." Staging is the restaurant industry term for when cooks work for short stints at other restaurants to learn and grow in their culinary careers—like an internship or apprenticeship.

The experimental nature of these chef collaborations creates a natural spontaneity and a win-win experience for diners and chefs alike. All of this strengthens the relationships among chefs and gives diners a truly once-in-a-lifetime glimpse into culinary genius. ◀





68 · Advantage Vol21 2023





Left: Octola consists of a 10-bedroom private lodge, a two-bedroom luxury villa and the new Glass Igloo Suite

estled in the heart of Finnish Lapland, this exclusive Arctic retreat epitomizes luxury, comfort and adventure. Despite its appearance of perfect isolation, reaching Octola is surprisingly effortless; guests can land at Rovaniemi International Airport, a 20-minute drive away, or use the helipad on the property. Either way, your journey here will prove to be out-of-this-world as you take in snow-blanketed forests, glistening lakes and wildlife aplenty.

Pioneered by Scandinavian travel company Luxury Action, Octola Private Wilderness was designed to cater to their top-tier clientele who crave exclusive lodgings in the Arctic. Janne Honkanen, Founder of Octola and CEO and Founder of Luxury Action, tapped Sámi architects to conceptualize his "new luxury" philosophy while taking cues from the region's nomadic Lapp and Sámi lifestyles.

Ideal for families or small groups, Octola consists of a 10-bedroom private lodge, a two-bedroom luxury villa and the new Glass Igloo Suite, which boasts a 24-hour concierge, a private butler, a chef, and a wilderness guide, all of whom can be hired out exclusively for more intimate stays. Unveiled in November 2022, the fully glassed igloo is a cozy, panoramic suite nestled in a coniferous forest. It features a private lounge and dining area, where a personal chef crafts Nordic



EMBRAER TIP

Different by design, the **Praetor 600** has the largest baggage compartment in its class and a generous wardrobe ideal for winter gear. Arriving at Rovaniemi International Airport (RVN), Octola Lodge is 20 minutes by car, one hour by snowmobile and three hours by husky dog sled.

cuisine using local ingredients, some foraged from the wilderness. It's a dining experience that transcends the ordinary, offering front-row seats to the celestial dance of the Northern Lights.

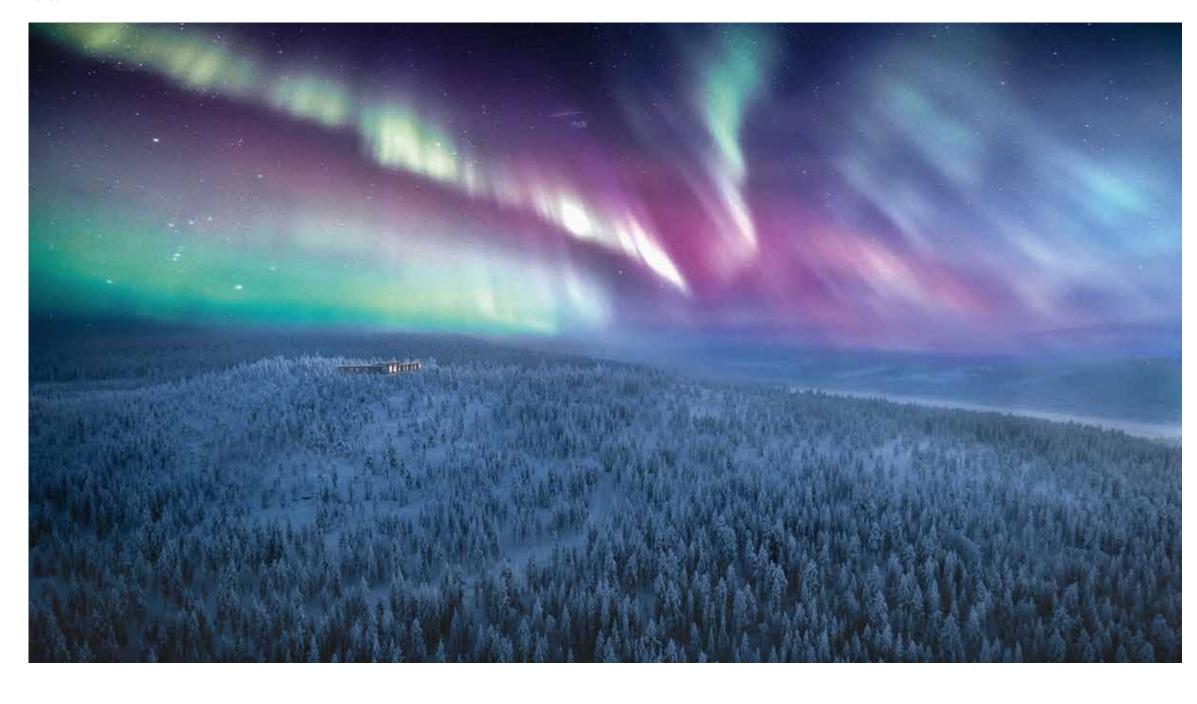
In this magical stretch of Lapland, winter temperatures can drop to a shivering minus 50 degrees Fahrenheit. "Octola is built in a challenging environment, and from the beginning, sustainability was key," shared Honkanen, who wanted travelers to experience the beauty of the Arctic, despite its extreme conditions that mean it's usually reserved for scientists and explorers. Geothermal heating, tap water sourced from a natural spring and reliance on green energy all contribute to Octola becoming the first five-star property in the Arctic and Nordic region with a negative carbon footprint.

"Octola is not just a hotel or a lodge; it is a private wilderness with all the services and access to multiple activities right from your door," commented Honkanen. Naturally, you'll want to use all 740 acres, choosing from the bespoke menu of 78 activities, each designed to cater to the adventurist at heart. From seeing Finland's only polar bears at Ranua Wildlife Park to braving a winter ice swim or dining in the ice bar with a Michelin-starred chef, you're sure to find that Octola promises unforgettable memories at every turn. "Our task is to build a connection between our guests and local people, local culture, local food ingredients, surrounding nature and its wildlife."

To take in the full Lapland experience, try husky sledding from November to April for an adrenaline-fueled adventure through the pristine snowscapes. Beginning at Octola's husky kennel, you can meet the spirited husky dogs and learn how to be a musher (driver) and the golden rules of sledding. It's suitable for the whole family as kids are wrapped up in fur for warmth and safety before the thrilling pursuit begins. Harnessed to the sleds, huskies follow a well-learned

Below: After sledding through the wilderness, gather by the campfire in a cozy Lappish "kota" while sipping hot drinks

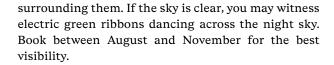




Left: Visit Octola Private Wilderness to see the Northern Lights (aurora borealis) phenomenon on up to 200 nights a year

Below (left): The Octola Spa and Health Clinic features a luxurious Finnish-designed, temperatureadjustable cold pool

Below (right): To simulate the traditional avanto experience, guests can alternate between sauna and cold pool



Octola's allure isn't limited to its luxurious accommodations and sustainability efforts; it extends to an indulgent world of relaxation and well-being at the Octola Spa and Health Clinic, which Honkanen describes as a "health spa for the spirit." For a truly holistic stay, simulate the traditional avanto experience-a dip in a hole in a frozen lake, a timehonored Nordic practice for rejuvenation-and alternate between soothing sauna sessions and the Finnish-designed, temperature-adjustable cold pool. For traditional aquatic pleasures, a high-end swimming pool awaits, equipped with a resistingcurrent function akin to those used by Olympic athletes. With floor-to-ceiling glass windows offering panoramic views of the Lapland wilderness, you'll feel as if you're swimming through snowscapes. Here, the healing power of the forest is amplified, offering a holistic retreat that encompasses mind, body and spirit under the Arctic sky. It's just the ticket after days spent on the back of a sled. ←





trail through the wilderness, easily pacing across frozen glacier lakes and up snow-capped hills. You needn't do much; simply hold on and relish the silence and the scenery along the way. After your day with the dogs, gather by the campfire in a cozy Lappish "kota" while sipping hot drinks to warm your chilled bones.

Being this close to the Arctic Circle, the Northern Lights (aurora borealis) phenomenon can be seen on up to 200 nights a year. To make the most of your winter jaunt, Octola will transfer you to an exclusive observation point far from artificial light pollution, where you can meet a geophysicist and ionospheric researcher from Finland's renowned Sodankylä Geophysical Observatory. Here, beneath the deepinked Arctic sky, you'll learn about the mesmerizing Northern Lights—how they form and the local beliefs

Connected Beyond The Wings

Stay up to date with Embraer from every corner of the globe





Featured Video

Experience excellence with the allnew Phenom 100EX. Discover how this new iteration of the Phenom 100 series delivers superior cabin comfort, operational versatility, and safetyenhanced, pilot-centric avionics.



Advantage Magazine

Live unconventionally and refresh your memory by reviewing past issues of Advantage online.



Configure It!

The online configurator puts the power in your hands to personalize an Embraer business jet tailored to you. Whether you want to design a Phenom or Praetor family aircraft, all it takes is a few clicks to select from a variety of cabin layouts, materials, and finishes to create a bespoke jet to your liking.





What's New on Instagram?

Want to stay upto-date with all the
latest happenings
at Embraer? Follow
us on Instagram to
discover engaging reels,
event highlights and
stunning photographs
of Embraer's industryleading portfolio.
@embraerexecutivejets





Cancer Patients Fly Free

Can You Spare a Seat?

Corporate Angel Network (CAN) is a 501(c)(3) nonprofit organization whose mission is to provide cancer patients with free transportation to treatment centers throughout the United States.

CAN works with corporate flight departments to match scheduled business trips with patient requests. Thanks to the generous support of over 500 partners, CAN has coordinated more than 67,000 flights.

Contact CAN to learn more about becoming a partner or to make a personal or corporate donation to support the mission.







CAN successfully leverages business aviation as a solution for families in need. We could not be more honored to support their mission, impacting lives in an immeasurable way.

-Monica McCluney, Embraer, Head of Corporate Social Responsibility

THE PINNACLE OF COMFORT

Embraer Photographer Richard Maneen demonstrates how the new Phenom 100EX isn't just a jet, but an embodiment of comfort and innovation, harmoniously entwined to deliver the ultimate flying experience



"Being able to photograph the new Phenom 100EX was nothing short of incredible. As was working alongside such a talented team of creatives. The entry-level jet's sleek design and remarkable craftsmanship truly make this aircraft stand out from the rest. These photos mark a memorable chapter in my career and I cannot wait to share them with the world."







- 1. Enhanced avionics featuring Garmin Prodigy Touch elevate the pilot's experience, reducing workload and making every flight smoother, more intuitive and sefer.
- 2, 3, 4. The best-in-class, high-tech interior design transforms every flight into a journey of relaxation or productivity and puts you in control of your environment effortlessly
- 5, 6. Benefiting from the Phenom family's reputation for high utilization and low maintenance costs, this aircraft is also one of the greenest dual-engine jets on the market





Around The World

Ending 2023 on a high note, Embraer's last quarter of events was the epitome of "excellence" at global airshows, via curated events, and through meaningful opportunities to speak on the path forward for business aviation



LABACE

With a deep heritage rooted in Brazil, it is always a pleasure for Embraer to return to LABACE in São Paulo, Brazil, to showcase our best-in-class business jets. On display at the August event were the Phenom 300E and Praetor 600.

NBAA-BACE

Embraer returned this October to one of the most exciting business aviation shows of the year, in Las Vegas, Nevada, to showcase the industry-leading Praetor 600, Praetor 500 and Phenom 300E, as well as debut the new Phenom 100EX for the first time. While there, the company also participated in crucial conversations around shaping a more sustainable ecosystem of air travel.



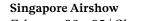


Dubai Airshow

The Middle East's largest aviation show was attended by Embraer's diverse portfolio of products. On display were the Praetor 600, as well as the E195-E2, C390 Millenium and Super Tucano.

On The Horizon

As we look forward to next year, we are eager to build on this year's next-level presence and bring our industry-leading aircraft to a city near you in 2024.



February 20 – 25 | Changi, Singapore

Aircraft on display: Praetor 600



EBACE

May 28 - 30 | Geneva, Switzerland

Aircraft on display: Phenom 100EX, Phenom 300E, Praetor 500, and Praetor 600



*Aircraft on display subject to change without notice.



Scan here to contact us about an upcoming

EMBRAER COMMITMENTS

Recapping a year of progress in shaping a sustainable ecosystem of private aviation

The path to sustainable aviation gets shorter every year thanks to companies like Embraer that are leading the way in researching, developing and adopting sustainable innovations.

Towards our commitment to achieve carbon-neutral operations by 2040, and business aviation's goal to Fly Net-Zero by 2050, Embraer took tangible steps throughout 2023 to lessen our global impact and lay the building blocks of a greener ecosystem of air travel.



To view more of Embraer's ESG initiatives, scan this QR code with your phone's camera.

- Increased the adoption of Sustainable Aviation Fuel (SAF) at the global headquarters in Melbourne, Florida.
- Successfully completed test flights utilizing 100% neat SAF on the Phenom 300E and Praetor 600.
- Received NBAA's Sustainable Flight Department Accreditation in recognition of the Embraer Flight Operations Department's exceptional environmental sustainability standards, including the reduction of emissions by more than 10%.
- Flew demonstration aircraft on SAF to industry events (including the use of book-and-claim when SAF was unavailable).
- Provided Embraer Executive Care customers with a carbon offsetting program (25 flight hours) in partnership with 4AIR, which saw 30+ sign-ups to-date.
- Moved up intermediate target to use electricity from 100% renewable energy for Brazil and Portugal operations, which was originally set to begin in 2025, but will now start in 2024. These regions represent almost 80% of Embraer's global consumption and the renewable energy will be sourced from solar, wind and more.
- Eve Air Mobility selects the first electric vertical takeoff and landing aircraft (eVTOL) production facility, which will be located in the city of Taubaté, in the state of São Paulo, Brazil. Additionally, Eve entered a partnership with NIDEC to supply electric motors to the eVTOL.



EMBRAFR

Felipe Alfaia | Director - Marketing, CRM & CX Kate Szymanski | Content Strategy Lauren Cozza Merlino | Manager External Communications Richard Maneen | Photographer

www.executive.embraer.com/advantage

NG.MEDIA

Nathalie Grolimund | Publisher Margaux Daubry | Managing Editor Amber Hunter | Copy Editor Jennifer Davis | Copywriter David Burghardt | Photo Editor Mareike Walter | Designer www.ng.media

CONTRIBUTORS

Alex Cox | Copy Amber Gibson | Copy Debbie Hathway | Copy Georgina Wilson-Powell | Copy Nora Walsh | Copy

Unless otherwise credited in each feature, all images are property of @EMBRAER. Every effort has been made to identify the copyright holders of material used and accuracy of the information in this publication. The publisher cannot accept responsibility for any errors, and you can contact us at editorial@ng.media for any inquiries. Reproduction in whole or in part without written permission is strictly prohibited. All information is correct as of press time but is subject to change.

Printed in December 2023, Produced with care by NG.MEDIA for EMBRAER SA. ©2023 NG.MEDIA. All rights reserved ADVANTAGE is printed on post-consumer recycled paper and produced with toxic-free inks.









BUSINESS JET PORTFOLIO

Embraer is creating tomorrow's world of bespoke private air travel today, utilizing industry-leading innovation, design and technology—all the while incorporating sustainable and socially responsible practices. As a global company with more than 50 years in aerospace, Embraer delivers the ultimate experience in business aviation through aircraft that feature disruptive performance, technology and comfort. Its portfolio consists of the Phenom 100EX, which offers unmatched cabin comfort, the highest levels of operational versatility and enhanced pilot-centric avionics; the Phenom 300E, which is the best-selling light jet for the past 11 consecutive years; and the Praetor 500 and the Praetor 600, the most disruptive and technologically advanced midsize and supermidsize business jets, respectively.

More than

1,700 AIRCRAFT

Operations in more than 70 COUNTRIES

Maker of the world's best-selling light business jet for

11 CONSECUTIVE YEARS

Every day, Embraer business aircraft operate around the globe, supported by a strong, responsive customer support network that's top-ranked in service across the industry. For more information, visit: executive.embraer.com



Use your phone's camera to scan the QR code to configure your own jet

PHENOM° 100 EX



The Phenom 100EX offers unmatched cabin comfort combined with the highest levels of operational versatility and enhanced pilot-centric avionics to deliver the ultimate flying experience to those in the cockpit and the cabin.

Occupants: 6/8 Range (4 pax, NBAA reserves): 1,178 nm High-Speed Cruise: 406 ktas M_{MO}: M 0.70

PRAETOR 500



The world's fastest and furthest-flying midsize jet is built to break boundaries and defy convention with class-exclusive technology, best-in-class performance and unprecedented comfort on continental flights.

Crew + Standard Pax/Max. Pax: 2+7/9 Range (4 pax, NBAA reserves): 3,340 nm High-Speed Cruise: 466 ktas M_{MO}: M 0.83

PHENOM[®] 300E



The best-selling light jet for the last 11 years running, the Phenom 300E combines best-in-class speed and range with innovative technology and uncompromising comfort to achieve the highest residual value in the industry.

Occupants: 8/11 Range (5 pax, NBAA reserves): 2,010 nm High-Speed Cruise: 464 ktas M_{MO}: M 0.80

PRAETOR 600



The Praetor 600 breaks the mold of what a supermidsize jet can do, offering class-exclusive technology, best-in-class range and unprecedented comfort on intercontinental flights.

Crew + Standard Pax/Max. Pax: 2+8/12 Range (4 pax, NBAA reserves): 4,018 nm High-Speed Cruise: 466 ktas M_{MO}: M 0.83





BUENOS AIRES

AUSTRALIA

- MELBOURNE
- PERTH SYDNEY
- **BELGIUM**

BRUSSELS

BRAZIL

CURITIBA, PARANA

GOIANIA, GOIAS

● IGARASSU, PE

• RECIFE, PE BELO HORIZONTE, MGCHILE

∢ • SÃO JOSÉ DOS CAMPOS **EMBRAER GLOBAL** HEADQUARTERS

• • • SÃO PAULO SOROCABA

CANADA ALBERTA

DORVAL

SANTIAGO

CHINA

BEIJING SHANGHAI TIANJIN CITY

CZECH REPUBLIC

ENGLAND BOURNEMOUTH

LONDON (LUTON AND STANSTED AIRPORTS) • FARNBOROUGH

FRANCE PARIS LE BOURGET

GERMANY

AUGSBURG BREMEN WESSLING

INDIA

• BELANGONDAPALLI,

HOSUR CHENNAI, TAMIL NADU

 SANTACRUZ EAST, MUMBAI

INDONESIA SOUTH ARON,

JAKARTA LEBANON BEIRUT

MEXICO

APODACA

NETHERLANDS AMSTERDAM

> **NIGERIA** • IKEJA, LAGOS

PORTUGAL ALVECA DO RIBATEJO

RUSSIA MOSCOW

SINGAPORE

● ● SINGAPORE

SOUTH AFRICA JOHANNESBURG

SLOVAKIA BRATISLAVA

SWITZERLAND

ALTENRHEIN BASEL GENEVA

 ABU DHABI ● ● DUBAI

UNITED STATES OF AMERICA

UNITED ARAB

EMIRATES

 AUGUSTA, GA BATTLE CREEK, MI

• BELGRADE, MT BOISE, ID

• CHATTANOOGA, TN • CLEVELAND, OH

DALLAS, TX • EAST ALTON, IL ●● FORT LAUDERDALE ←●●●●

 GRAND JUNCTION, CO • GREENVILLE, SC

HAYWARD, CA • HILLSBORO, OR HOUSTON, TX

(George Bush & Hobby Airports)

• INDIANAPOLIS, IN LAS VEGAS, NV

LINCOLN, NE LOS ANGELES, CA

LOUISVILLE, KY MESA, AZ

VENEZUELA

CARACAS

MEI BOURNE EMBRAER EXECUTIVE JETS HEADQUARTERS

NAPLES, FL

PROVO, UT

RONKONKOMA, NY

SANFORD, FL

ST LOUIS, MO • TITUSVILLE, FL

TRENTON, NJ

VAN NUYS, CA WICHITA, KS

Fleet & Special Missions

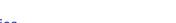


Mark VanZwoll

mark.vanzwoll@embraer.com | (321) 361-7231 Vice President of Fleet and Special Missions Sales



Locations: UK & Northern Europe





Chad Williams

chad.williams@embraer.com | (770) 235-8477

Locations: Alabama, Arkansas, Georgia, Kentucky, Mississippi, Tennessee



Locations: Connecticut, Delaware, Maine, Maryland, Massachusetts, Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont,

Washington, D.C.



allan.gray@embraer.com | (321) 272-3439

Locations: Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Wisconsin



gregory.weldele@embraer.com | (321) 272-1913

Locations: Louisiana, Texas



doug.giese@embraer.com | (310) 699-7891

Locations: Arizona, California, Hawaii, Nevada

Erik Norburg

erik.norburg@embraer.com | (321) 499-0852

Locations: Colorado, Kansas, New Mexico, Oklahoma, Utah



William 'Cody' Murphy

cody.murphy@embraer.com | (321) 412-7685

Locations: Alaska, Idaho, Montana, North Dakota, Nebraska, Oregon South Dakota, Washington, Wyoming, Canada



Taylor Richards

taylor.richards@embraer.com | (321) 405-9362

Locations: Florida & the Caribbean Islands



Craig Lammiman

craig.lammiman@embraer.fr | +44 7557 688321

Margaux Bodard

margaux.bodard@embraer.fr | +33 658 860 224

Location: Southern & Western Europe, North Africa

Salma Abu Ziada

salma.abuziada@embraer.com | +971 (0) 58 507 8905

Location: Middle East, South Asia, Central & Southern Africa

Adam Johnson

adam.johnson@sin.embraer.com | +61 458 818 710

Location: Asia Pacific

Latin America

Augusto Rocha

augusto.rocha@embraer.com.br | +55 11 98152 7905

Locations: Brazil (states: AL, BA, CE, ES, MA, MG, PB, PE, PI, RJ, RN, SE, SP (DDD codes 11, 12, 14, 15, 16)

Ricardo Silva

silva.ricardo@embraer.com.br | +55 11 9 8455 2545

Locations: Brazil (states: AC, AM, AP, DF, GO, MS, MT, PA, PR, RO, RR, RS, SC, SP (DDD codes 11, 13, 17, 18, 19) and TO)

Cori Lima

cori.lima@embraer.com | (321) 419-8529

Locations: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama





ellen.wittenberger@embraer.com | (321) 586-7041

Locations: North Carolina, South Carolina, Virginia, West Virginia, Ohio



Europe, Africa, Middle East, APAC

pana.poulios@embraer.fr | +49 172 851 9999

Locations: Central & Eastern Europe



Use your phone's camera to scan the QR code to contact us



