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JOHN TERZIAN

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FEATURED CONTRIBUTOR

JEFF WIEAND

Wieand has contributed to **BJT** ever since we began publishing in 2003. By his count, this issue's feature on business jet financing (*see page 24*) is his 98th article for the magazine.

A 1985 graduate of Harvard Law School, he worked on his first aircraft transaction two years later. "I was immediately fascinated by the complicated interactions of FAA regulations, federal and state laws, and traditional legal issues like liability protection," he says. "Back then, business aviation law was just starting to come into its own, and I was lucky to get involved."

Today, Wieand is senior vice president and general counsel at Boston JetSearch Inc. and a member of the National Business Aviation Association's Tax Committee. In his spare time, he enjoys bicycling, travel, classical music, and reading. He also serves on the board of several organizations in his hometown of Concord, Massachusetts.

Wieand visiting Machu Picchu.

Coming Soon in BJT

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On the Cover:

John Terzian, photographed for **Business Jet Traveler** by Manuello Paganelli.

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BY EMBRAER



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- *Michael Silvestro, CEO, Flexjet*
Watch Mike's story and request more information at
EmbraerExecutiveJets.com/Mike



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Up Front



If you're a professional athlete looking to win a championship, you might want to try tilting the odds in your favor by appearing on the cover of our magazine.

Consider the case of race-car driver Lewis Hamilton. He was having a frustrating year in 2009, when we featured him on our cover, but then he switched teams (from McLaren to Mercedes) and handily won his second, third, and fourth Formula One World Championships. (He's the current world champion.)

Then there's golfer Adam Scott, who graced our cover in 2008 and, just five years later, proceeded to win the coveted Masters Tournament. Tennis great Novak Djokovic, meanwhile, had already racked up five Grand Slam singles titles when he appeared on our cover in 2012, but he went on to win an astonishing seven more and in 2016 became the eighth player in history to achieve the Career Grand Slam.

There's more. Golf pro Sergio Garcia, a 2012 cover, made headlines in 2017 when he won the Masters, his first major championship. Arizona Cardinals wide receiver Larry Fitzgerald was named NFL Man of the Year shortly after we interviewed him for a 2017 cover story. Mark Cuban's Dallas Mavericks basketball team won the NBA championship just a year after we featured him on a 2010 cover. Cuban also became a

star of TV's *Shark Tank* soon after his article appeared in our pages.

Are these all coincidences? We think not. And you don't have to be a sports figure to benefit from the magical boost provided by a **BJT** cover appearance, as evidenced by the experience of a certain flamboyant New York City billionaire real estate developer. Our editor, Jeff Burger, interviewed him about his political views in 2011, when he was a mere reality-TV figure who had just taken delivery of a Boeing 757. Five years after the **BJT** encounter—and against all odds—he was elected President of the United States.

This brings us to the current issue and our cover feature on restaurant and nightclub entrepreneur John Terzian (*see page 16*). As you'll read in my interview with him, he has already built a successful business that stretches from L.A. to Dubai. But those achievements may pale in comparison with what comes next. After all, anything's possible now that he has a **BJT** cover to his credit.

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JASON BRANT

DANA MECUM

Boy, it's sure good to run into a no-b.s. car businessman [*"Dana Mecum," December 2017/January 2018*]. I have watched a couple of Mecum auctions on TV and I see Dana moving through the crowds like he's one of the everyday car nuts. What a refreshing change from the usual car-world celebrities.

*Dave Russell
posted on bjtonline.com*

AIRPORT CODES

Regarding "Unraveling Airport Codes" [*On the Fly, October/November 2017*]: Many of these codes date from the time that Non-Directional Beacons (NDBs) were the primary navigation aids available. The NDB is essentially an AM radio station that constantly transmits the airport's three-letter identifier in Morse code. Each NDB had a radio license, and the three-letter airport identifier was combined with a "K" for the radio station identifier. At our airport in Kissimmee, Florida, our NDB-transmitted our airport code is: I-S-M. When you combine that with the understanding that the letter "K" was actually the first letter of our designated radio transmitter, you have KISM, for Kissimmee.

*Terry
posted on bjtonline.com*

A slight correction/addition to the article as the three-letter airport codes are known

as IATA identifiers and the four-letter ones are ICAO identifiers. The statement that K precedes all ICAO codes works only in the U.S. At Paris's Le Bourget the IATA code is LBG but the ICAO code is LFPB, for example, and at London Heathrow, the codes are LHR and EGLL. Even in Hong Kong, the codes are HKG and VHHH. Otherwise a good read on the origin of most three-letter identifiers.

*Oskar
posted on bjtonline.com*

FLYING CARS

Mark Phelps's "A Down-to-Earth Look at Flying Cars" [*Exit, October/November 2017*] was a good article and made salient points, but you didn't take it far enough. What other flying car options are available? What are the technical specs on these machines? Are any of them IFR capable? What kind of training and/or certifications will be required? Will any of them be capable of taking off/landing on a freeway, or even a straight two-lane highway? What kind of ranges are all the proposed machines going to be capable of? I could ask more, but you left a lot of unanswered questions.

*John P. Clements
posted on bjtonline.com*

Phelps responds: All good questions. I wish I'd had more space.



Terrafugia Transition

COFFEE ON THE GO

Thank you for including the AeroPress in the "Treasures Under Wraps" [*December 2017/January 2018*]! In 2017, I traveled to five continents, 18 countries, and 23 U.S. states. One constant companion on all these adventures was the simple yet invaluable AeroPress. Life is too short for sh\$%# coffee!

See you somewhere in the world in 2018...I'll make the coffee!

*Eric Miller
via email*



JET AVIATION'S ROB SMITH

Thank you, Mr. Smith, for letting us know more about you! [*Industry Insider, August/September 2017*] Very interesting interview.

*Ana Alvarez
posted on bjtonline.com*

FAN MAIL

I just want you to know that I'm sure your success with **BJT** lies in the fact that you consistently deliver fun, entertaining, informative, and well-presented articles of interest to the folks in the back of these planes. Congratulations, and keep being innovative.

*Al Higdon
via email*

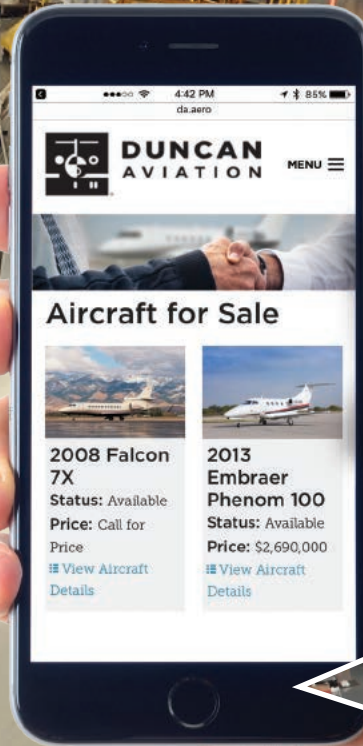
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Rebirth Brass Band

Help New Orleans Celebrate a Big Birthday

This is a great year to visit New Orleans, which is marking its tricentennial with a rich menu of concerts, parades, festivals, and other events. Among the highlights:

Mardi Gras (February 13, though parades began in January), which will feature fireworks on the Mississippi River and tricentennial-themed floats, such as “L’Ancienne Nouvelle-Orléans,” which will depict the people, places, and events that shaped the Crescent City.

The New Orleans Jazz Fest (April 27–29, May 3–6), which will close with a spectacular tricentennial fireworks show. The lineup hadn’t been released at press time, but you can expect big names: last year’s show featured acts like Stevie Wonder and Dave Matthews, plus such local legends as Irma Thomas.

A NORD (New Orleans Recreation Development) tribute to world-renowned musician and

composer **Branford Marsalis** (March 6), who will be interviewed by his brother Delfeayo. This is a “homecoming” for athletes and cultural icons who developed their talents on the playgrounds of New Orleans such as Patricia Clarkson, NFL football stars Jacoby Jones and Marshall Faulk, the Neville family, and more.

A concert called **“Up from the Streets”** (March 10), in which local and internationally known artists will focus on New Orleans as the cradle of jazz and depict the city’s musical history and global influence.

The New Orleans Museum of Art’s **Duke of Orléans exhibit** (October 25–January 27, 2019), which will showcase art collected by Philippe II, Duke of Orléans and the city’s founder.

For details on these and other tricentennial events, visit 2018nola.com/events.

—Margie Goldsmith

THE FUNNY SIDE OF THE FAA

If you’re on a flight to Orlando, Florida, and overhear talk in the cockpit about the “GOOFY” seven airport approach procedure, you might think the pilot is expressing an unfavorable opinion. Not at all. Because Orlando is associated with studio theme parks, the FAA decided to have a little fun in naming the air traffic procedures there. In addition to GOOFY, they include the MINEE five, PIGLT four, and BUGGZ two. (Waypoints allow for only five-letter words; hence the spelling.)

And Orlando isn’t the only airport where the FAA has been comically creative: consider the arrival approach waypoints for a runway at New Hampshire’s Portsmouth International Airport, a nod to the Tweety bird and Sylvester cat cartoons, where Tweety exclaims, “I tawt I taw a puddy tat. I did.” The landing sequence of the waypoints is ITAWT, ITAWA, PUDYE, TTATT, IDEED. So who says the FAA doesn’t have a sense of humor? —Gordon Gilbert

QUOTE UNQUOTE

“Not even heads of state get that kind of treatment. You hear about this and you have to wonder what else they were spending money on. You really have to question the financial oversight and controls and internal audit. You have to question the entire organization.”

—Scott Davis, an analyst and founding partner of Melius Research, reacting to GE’s use of a so-called chase plane—a corporate jet with no passengers that followed former CEO Jeff Immelt’s jet

SOURCE: NEW YORK TIMES, NOV. 4, 2017

New Restrictions on Travel to Cuba

The Trump administration recently imposed regulations that require Americans who visit Cuba to do so through guided tours provided by authorized companies. In addition, the rules prohibit U.S. citizens from staying at 83 hotels on the island that are owned by foreign governments.

“Americans can still travel to Cuba under the popular people-to-people category, provided they do so with an authorized company,” says Tom Popper, president of insightCuba. “Travelers can stay in many hotels across the island, and you can still bring rum and cigars home for personal consumption.”

However, “the new regulations make it much more difficult for individuals, because now they

must go with a company,” says Chad Olin, CEO of Cuba Candela, which specializes in “personally curated” trips to the island. “This policy makes no sense, as 81 percent of Americans support travel to Cuba [according to a 2015 CBS News poll].”

No special restrictions apply to visitors traveling by private jet, just the rules that affect all travelers. At present, PlaneSense, ExcelAire, Wheels Up, JetSuite, IBC Airways and others operate charter flights to Cuba. “Restrictions regarding which hotels you can stay at will make it much less attractive to travel to the island,” says IBC’s John Hennig. “I am certain it will affect our charters.” —*Margie Goldsmith*



FOTOLIA

Museum to Kids: Get Up and Move



The 472,900-square-foot Children’s Museum of Indianapolis—the world’s largest facility of its kind with 120,000 artifacts—will get even bigger when a \$38 million, 7.5-acre addition opens in late March. Called the Riley Children’s Health Sports Legends Experience, the expansion focuses on health and fitness through the lens of sports and features such hands-on attractions as a 60-foot-tall Tree House

of Sports to climb up and slide down, kid-sized tennis courts, a baseball field, and four Pete and Alice Dye–designed nine-hole golf courses. Also here are life-sized bronze statues of sports legends, including the NBA’s Larry Bird, stock-car racer A.J. Foyt, and track star Wilma Rudolph. The purpose of the immersive Riley Experience is to communicate that an active lifestyle is fun, important, and about participation—not skill levels, scores, or competition.

—*Margie Goldsmith*



Giving Back



Justice in Aging – Fighting Senior Poverty Through Law

“Our society must make it right and possible for old people not to fear the young or be deserted by them, for the test of a civilization is the way that it cares for its helpless members.”—Pearl S. Buck

For the past 45 years, Justice in Aging, a national nonprofit legal advocacy organization, has been giving seniors the opportunity to live with dignity regardless of financial circumstances. Through administrative advocacy, litigation, and the provision of expertise and resources, the organization allows seniors to be free from the worry, harm, and injustice caused by lack of health care, food, or a safe place to sleep.

Justice in Aging (justiceinaging.org) uses the power of law to strengthen the social safety net and remove the barriers faced by low-income seniors—especially those who have traditionally lacked legal protection, such as women, people of color, members of the LGBTQ community, and individuals with limited English proficiency. The organization aims to ensure access to programs that poor seniors depend on—including Medicare, Medicaid, Social Security, and Supplemental Security Income (SSI)—with the goal of providing a future we all envision for our loved ones. —*Lysbeth McAleer*

BJT readers—who represent one of the highest-net-worth magazine audiences anywhere—clearly have the means to contribute to a better world. To help you do that, we’re spotlighting one deserving organization per issue. All of them have received a four-star overall rating from Charity Navigator (charitynavigator.org), which evaluates philanthropic institutions based on their finances, accountability, and transparency.

Remembering the “GREATEST SHOW ON EARTH”

America’s most famous circus is no more, but our columnist savored a museum that recalls its glory days.

by Joe Sharkey

There was obviously a lot of money in hauling elephants, clowns, lion tamers, bearded ladies, and the proverbial daring young man on the flying trapeze from town to town. The circus impresario John Ringling not only enjoyed his loot but left evidence of it for the rest of us to admire.

The Ringling Brothers and Barnum & Bailey Circus folded its figurative tent last May, a casualty of changing tastes and impossibly mounting costs. But if you appreciate the glory days of the “Greatest Show on Earth,” I recommend a visit to the sprawling John and Mable Ringling estate in Sarasota, Florida, where a gracious art museum sits incongruously adjacent to a Circus Museum, itself an extravaganza (a favorite circus word) of artifacts and art.

In its waning years, Ringling Brothers was prominent among circuses vehemently criticized by animal-welfare forces for employing elephants for entertainment. Ringling retired

its last herd of these animals a year before the circus closed for good, but elephants were the iconic Ringling image over its 147-year history and always were the star attractions in the giant, raucous parades that heralded the circus coming to town.

With 19th century roots in the frenzied hulloaloo of P.T. Barnum, the circus practically invented mass publicity, and over the years local media traditionally swooned when Ringling Brothers came to town. Given what we now know about how elephants were treated, I am not proud to note that in 1972, as a young columnist at the *Philadelphia Inquirer*, I was among the giddy local reporters who rode sparkingly bedecked elephants in the circus parade. (For my efforts, I received a framed certificate with a gold stamp naming me as an “Elephant Equestrian Extraordinaire.”)

So, in a recent visit to the Ringling estate, I was somewhat comforted to learn that some of

this hoopla helped pay for the Renaissance-style palace that Ringling and his wife Mable built as an art museum. Today, it houses more than 10,000 objects—including European, American, and Asian paintings—in 21 galleries facing out through a loggia to a magnificent garden in a setting inspired by the Palazzo Ducale in Venice.

My wife and I spent a morning in the art museum, and if we’d had the time we would have stayed much longer. Then we wandered over the grounds to the raucously designed Circus Museum and its adjacent Tibbals Learning Center, which features an astonishing scale model of the Ringling circus in its heyday, spread over a display area larger than a tennis court. Dominating the 3,800-square-foot model is the Big Top tent, which the circus finally abandoned after the 1956 season in favor of indoor arenas.

At the Circus Museum, I was especially taken with the transportation displays, given the amazing logistical challenges of getting



The John and Mable Ringling estate in Sarasota, Florida, features art objects, a magnificent garden, a Circus Museum, and more.

PHOTOS COURTESY OF THE JOHN & MABLE RINGLING MUSEUM OF ART

PHOTOS: NANCY SHARKEY



The Ringling estate houses the circus's truck-mounted giant "human cannon" and a gaudy 1919 carriage with hand-carved panels.

this gigantic show on the road from one town to the next. Of interest to me were a gaudy 1919 carriage with hand-carved carousel-like panels and a bandwagon carrying uniformed musicians that rode at the head of the parade.

Ringling's private luxury Pullman car, which rode in the middle of the mile-long circus train, also is on display. But as someone with an abiding interest in aviation, I was most taken with a much more basic form

of transportation: the truck-mounted, compressed-air-fueled giant cannon from which "human cannonballs" like the world-famous Zacchini Brothers were fired high into the Big Top to a net as far as 200 feet away.

The human cannonball was traditionally the most dangerous act in any of the circuses and carnivals that featured it globally for well over a century. Some 30 people are said to have died upon a flawed landing—most

recently in 2011 at a stunt show in England.

Still, as a basic form of short-haul flight, the act remains intriguing. It features fast point-to-point service—and if and when you reach your destination, crowds of people applaud and cheer. **BJT**

Joe Sharkey (jsharkey@bjtonline.com), the author of six books and a longtime **BJT** contributor, wrote a weekly business travel column for the *New York Times* for 16 years.

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CROSSING THE ATLANTIC WAS EASY COMPARED TO NAVIGATING CONGRESS.

When "Lucky" Lindy made his transatlantic crossing, he didn't have to deal with an ocean of congressional wrangling (maybe that's why they called him "Lucky"). The prevailing winds blew in his favor. But today, those winds have changed. Flying for business is more scrutinized than ever. Luckily, there's NBAA. We've made a home on the Hill, so that our members can make a living in the sky. Because business aviation enables economic growth. And at NBAA, we enable business aviation.

Join us at nbaa.org/join.

Boost the value of your collectibles

These tips can help assure that your treasures are not only fun to own but as profitable as possible.

by Chana R. Schoenberger

Got a drawer full of watches or a cellar full of wines? If you're a collector, you're probably motivated largely by a love of whatever you're accumulating. But since collectibles often represent sizable investments, you're likely also interested in seeing yours appreciate. We asked experts in several fields about ways you can build a valuable collection, and sell it for the highest possible price.

Art

Especially because commissions and other transaction costs can eat up 15 to 30 percent of the price when you sell a piece of art, it's important to pay as little as possible when you buy, says Andy Augenblick, president of Emigrant Bank Fine Art Finance. When purchasing art, you should hire an independent adviser so that you can get unbiased counsel as you perform due diligence on pieces you're considering. Look for someone who belongs to an organization like the Association of Professional Art Advisors, which stipulates that its members be paid in a transparent way and only by one source, ideally the client. Have your consultant scout out major art fairs so you know what's for sale at what price and don't have to scramble to learn about offerings when an event opens.

"Make sure that you're not only buying what you love but the best of what you love," says Sharon Hurowitz, an independent curator and art adviser in New York City.

Art buyers should continuously edit and audit their collections, she says. Follow auction prices for artists whose work you own, visit galleries where they're featured, and consult the catalogs raisonné, the book-length compendia of artists' portfolios.

Protect your artworks by adding ultraviolet-proof glazing to your windows or art frames, controlling the humidity in rooms where your



collection is displayed, and rotating which pieces are on view, Hurowitz says.

"You can buy an exceptional thing but if its condition changes while you own it, you've potentially greatly changed its value," she adds.

To enhance the provenance of the art you own, lend it to museums or to exhibits at hospitals or libraries, Hurowitz says. Start by getting to know curators and scholars who specialize in the artists whose works you own, and let them know your art is available for display or research.

Becoming part of the art world—visiting art fairs, museums, and galleries, and attending events—is a must for collectors, Hurowitz says.

When you decide to sell a work, consult an independent expert and a tax attorney and possibly also your estate lawyer, Augenblick suggests. Make sure selling is the smart thing to do tax-wise (*see box on next page*), and also that you're selling at the correct venue. When one recent Midwestern client wanted to unload a Chinese art collection, Augenblick's team consigned it not to an American or European auction house or dealer but to China Guardian, an auctioneer in Beijing that specializes in this kind of artwork.

Antiques

The guidelines for maximizing the value of antiques are similar to those for artworks, says Anne Igelbrink, an expert in European and

English furniture at the Christie's auction house. Collectors should buy the best pieces they can afford, and should train their eyes by visiting house museums and collections wherever they travel.

One difference is that the market for antique furniture "has become very technical," Igelbrink says, because today's buyers are knowledgeable about the details of each piece's restoration history. For instance, if any ormolu (the gilt decorations found on ornate pieces) have been replaced, it could have a big effect on value," she says. Unless an antique needs conservation work urgently, adds Igelbrink, it is likely to hold its value better without alterations.

Musical instruments

The most valuable and sought-after stringed instruments are the works of master makers Stradivarius, Guarneri del Gesù, and Bergonzi, says Sean Carpenter, president and CEO of Carpenter Fine Violins & Collectibles in New York City. These instruments can go for eye-popping prices; in 2013, a del Gesù reportedly sold for more than 9.8 million British pounds. Rare instruments that have solid documentation and provenance and are in nearly new condition are the most valuable.

Your instruments might be able to generate revenue while you own them. Many collectors lend their instruments to professional performers.



“It’s investment philanthropy,” Carpenter says. “You’re not only buying something that’s going up in value; you’re helping an up-and-coming or established artist who can’t afford to buy it.” You’re also saving money, he adds, because it’s customary for the musician to pay for insurance on the instrument as well as for all maintenance.

Cars

Classic cars are fun to drive, fun to look at, and—sometimes—a good investment. When you’re in the market for one, research is key, says Rick Drewry, senior claims specialist for collector vehicles at American Modern Insurance Group: “The make, model, or type of car you’re most passionate about is a good place to start your research.”

To get the best return on your vehicles, you should assemble all the documentation you can find on them, says Brian Rabold, vice president of valuation services at Hagerty, the biggest insurer of classic cars. There’s a saying that buying a classic car is like buying all the previous owners; it’s important to know who they were.

“Being able to point to the ownership history with paperwork that can tell where that car has been, what kind of care it’s been under, period photographs—that can really help set a car apart,” Rabold says.



Many manufacturers of high-end autos have classic or heritage departments that you can contact to obtain original invoices or shipping manifests that show where and when a car was delivered, how it was configured, and what the original paint colors were, he adds.

“Pay attention to particulars, such as chrome, glass, interior, engine compartment, correct fasteners, and hoses,” Drewry says. Having documents that prove the car is still the way it was at the point of sale speaks well about the way you care for your cars and can boost your sale price, he says, adding that “almost 100 percent of the time, people will buy the car with the documentation rather than the one without.”

To get your car noticed, offer to loan it to automobile museums. But, cautions Drewry:

Don’t forget taxes

Profits on collectibles held longer than a year are taxed at a long-term capital-gains rate of 28 percent, compared with 20 percent for stocks and bonds. On top of that, you may be subject to the 3.8 percent Net Investment Income Tax, and possibly a state or city tax. So when you add to your collection, consider the tax implications for the entity that makes the purchase, says Andy Augenblick, president of Emigrant Bank Fine Art Finance. It’s common for high-net-worth collectors to buy items in the name of a trust, family partnership, or LLC, instead of in their own names, he says. This strategy potentially can lower your taxes, and can also keep these assets away from creditors. —C.R.S.

“Always check to make sure the vehicle is properly insured by the museum’s policy or your own.”

One of the most enjoyable perks of owning classic cars is exhibiting them in shows, to compete for awards known as concours d’elegance. Winning these competitions, in which judges rate vehicles based on their condition and historical significance, can give your car prestige, Rabold says. But if you’re thinking about selling, be careful not to exhibit at too many shows; once an auto competes in a particular event, Rabold explains, its owner can’t bring it back for a few years, so entries will close off avenues for future owners.

Before you put a car up for sale, get it detailed. Classic cars are rated on a scale of 1 (best) to 6 (worst) for condition; a detailer can help raise the condition of a vehicle from a 3 to a 3+ or 2-, Rabold says, which “can have a big impact on value.”

Wine

Investment-oriented wine collectors—those who don’t plan to drink what they buy—make most purchases at auction, where it’s possible to acquire individual bottles or a whole collection, says vintner Julie Rothberg, an owner of 13th and Third Wines. Most wine auctions take place through specialist auction houses like Zachys or Acker Merrall & Condit, or larger auctioneers like Sotheby’s. To see what a specific bottle might be worth today, Rothberg says, look it up on WineBid.com.

It’s difficult to predict which wines will appreciate, but certain types—vintage Champagne, Sauternes, vintage port, any limited-edition run of a high-end winery—should do well, Rothberg says. A wine that has attained cult status, such as one that can be bought only from a winery’s

mailing list and not from retail shops, is also likely to gain value, she says.

To keep your wines in good condition, be sure to store them properly. High-value wines should be kept in a temperature-controlled environment, either in your home or in a commercial storage facility.

“You want to be able to show the provenance of the wine, to show that it has been immaculately preserved since it left the winery,” Rothberg says.

Jewelry and watches

Anyone who thinks of their jewels as an investment should approach jewelry buying with resale potential in mind.

Large gemstones—particularly high-quality diamonds, emeralds, and sapphires—make the best investments, says Greg Jezarian, who owns G. Jezarian Fine Jewelry in New York City. While semiprecious stones like alexandrites and tanzanites can be beautiful, they are where jewelers make much of their margins, he says. These stones are difficult to resell at a profit, as are pearls.

While it was once difficult to get independent information about a gemstone, such data is widely available today. Diamonds certified by the Gemological Institute of America have microscopic laser-cut serial numbers written on the side of the stone.

For maximum investment value, buy classically cut stones, not fashionable styles, Jezarian says. Timeless cuts include round, emerald, and cushion-cut stones.



High-end watches—especially men’s watches—is another collectible category that can pay off well, Jezarian says. For maximum appreciation, he recommends Rolex Submariner and Daytona watches, as well as Patek Philippe, Breitling, and Breguet. Limited editions of these brands are particularly good investments, he notes. **BJT**

Chana R. Schoenberger (cschoenberger@bjtonline.com) has been an editor at *Forbes*, a reporter for Dow Jones and the *Wall Street Journal*, and a news editor at *Bloomberg News*.

Boozy Bellows

John Terzian

The founder of h.wood Group, who oversees a hospitality empire, says private jets “make business 10 times better.”

by Jennifer Leach English

You’d be hard-pressed to find anyone more passionate about any industry than John Terzian is about hospitality.

As the primary founder and CEO of the h.wood Group, he is the creative visionary behind nine of today’s hottest, most exclusive restaurants, clubs, and bars in Southern California, Colorado, and Dubai, UAE. Besides overseeing these nightspots and a thriving events business, Terzian handles “everything” for about 25 private clients, providing personal chefs, entertainment, complicated travel accommodations, and private lift.

I met him at the Mandarin Hotel’s Asiate restaurant, on the top floor of the Time Warner Center in New York City. He was fascinating to watch because he seemed to elegantly glide into the restaurant, almost fading into the background, quietly observing

every detail. I found him unexpectedly soft-spoken, unassuming, polite, focused, and professional.

The success of his venues testifies not only to his understanding of the market but to the customer loyalty that he has established in the cutthroat L.A. scene. But despite his young age, Terzian is no overnight success. He didn’t hit his stride until after two early nightclub ventures had left him penniless at 27, forcing him to move back to his childhood bedroom.

Having come a long way since then, Terzian has set his sights on new challenges. He and his managing partner Brian Toll are planning another half dozen or so properties in such cities as Chicago, Dallas, San Francisco, and Scottsdale, Arizona. They’re also creating a hotel brand, most likely to debut in Las Vegas, that will raise their profile exponentially. Don’t bet against them.



A Market View

from the World's Leading Aircraft Management Companies



Brian Kirkdoffer
President and CEO
Clay Lacy Aviation

California-based Clay Lacy Aviation, with 110 managed aircraft, celebrates its 50th anniversary this year.



Michael Tamkus
Senior Vice President, Owner Services and Management Sales Executive
Jet Management

Executive Jet Management, a subsidiary of Berkshire Hathaway-owned NetJets, manages some 210 aircraft.



Don Haloburdo
Senior Vice President
Flight Services
Jet Aviation

A subsidiary of General Dynamics, Jet Aviation has some 160 aircraft in its U.S. managed fleet.



Bill Papariella
CEO
Jet Edge International

California-based Jet Edge International, a Bard Capital company, manages about 50 aircraft.



Michael Moore
Vice President of Aviation Sales
Meridian

The roots of Meridian, with some 30 aircraft under management, go back to 1958 at its Teterboro, New Jersey base.

Growing acquisitions and charter activity signal a long-awaited rebound in business aviation. AIN asked experts from five leading aircraft management firms for their perspective on issues affecting owners today. An edited transcript of their comments follows.

What brings clients to your management company?

> **Brian Kirkdoffer, Clay Lacy Aviation:**

Our customers refer the large majority of new clients, but it is the experience and personal attention our people provide that enable those referrals. We have the strongest team in the industry and our core leadership team has been together for over 25 years. Add to that, in the past five years we moved from being a West Coast company to a national one, capped by our acquisition of Key Air in 2016, which provided the foundation for a new operations and maintenance center in Connecticut. We now have aircraft in 20 cities around the U.S., and owners who often fly around the country have access to dispatch and maintenance centers and much more support wherever they are.

Bill Papariella, Jet Edge International:

Clients choose Jet Edge because we manage their asset as if it were our own. Each owner has unique needs and desires, and our services are very customizable. We don't put a round peg in a square hole. We're extremely flexible.

Our company is built on relationships and word of mouth, and most clients come from owner referrals. We're also very active in the charter market, and most of the fleet is on our 135 certificate, so we have owners who are former charter customers, and clients who upgraded from jet cards or fractional ownership to their own aircraft. Many owners want to take advantage of demand for our charter product to maximize utilization of their aircraft. We have airplanes that do up to 100 hours a month in charter.

Michael Tamkus, Executive Jet Management:

Clients choose EJM for our industry-leading safety, service, security, and experience. We invest heavily in safety management, including our emergency-response plan and risk-mitigation. Because we're owned by NetJets, our clients benefit from our ability to optimize efficiencies and manage their best interest through charter, fractional, and full-aircraft/asset management.

We have strengthened our partnership with the aircraft manufacturers and continuously align our goals to support owners' interests and goals for their flight departments. We have dedicated crews and maintenance technicians for each owner's aircraft. We embrace the culture flight departments have built while driving our experience to them. Our mission is to take on as much of the administrative responsibilities as possible. Our commitment to industry groups and focus on staying ahead of the regulatory environment keeps our flight departments under management on the leading edge of compliance and best practices.

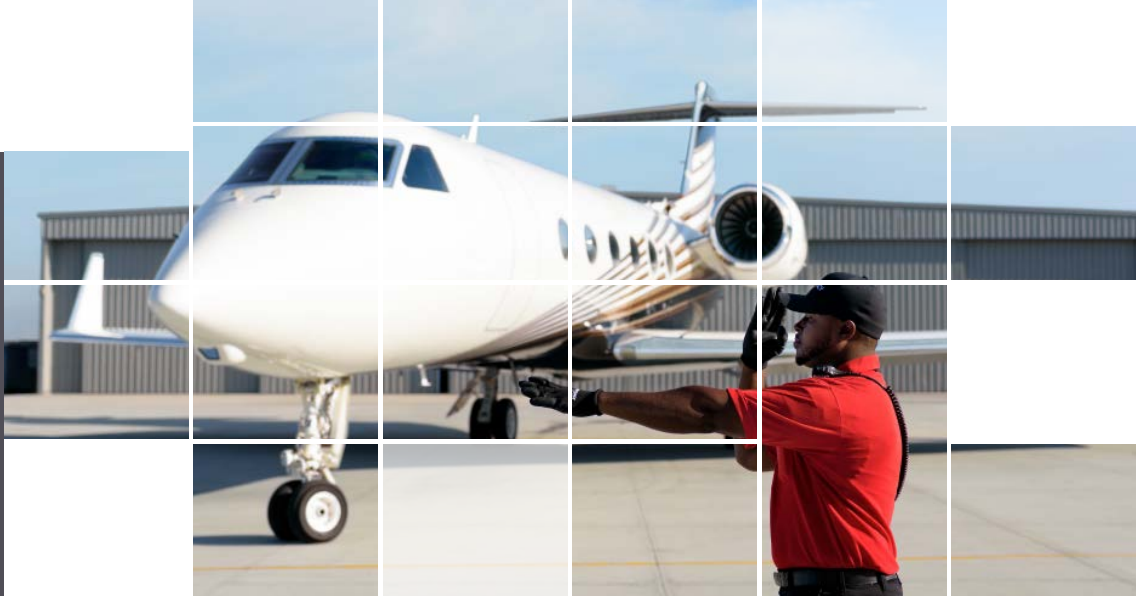
Don Haloburdo, Jet Aviation:

Most owners who come to Jet Aviation for aircraft management services are international travelers looking for a company with an established track record who can support them no matter where they are. Having our fleet of aircraft managed out of Europe, Asia, and the Middle East, and a network of management and FBO structures around world, are benefits for customers who move from one continent to another. We're never too far away to provide additional services they're going to need. Also, because we're a subsidiary of General Dynamics, clients don't have to worry about our financial stability, and we have access to resources and information we otherwise wouldn't have. When a client is planning a trip, we evaluate the security situation in whatever part of the world they're going to and we plan comprehensive risk-mitigation contingencies.

Michael Moore, Meridian:

The reason for Meridian's success is that we do a great job for clients and they tell their friends. That's how we grow and build our brand. We also hear [from customers] that big factors include our financial stability, the longevity of the company, and our ability to offer excellent customized management programs. The most common reason for leaving a management company that I hear from clients who come to us is that they're not getting the service they want. We're focused on customer service and professionalism. Our whole company—every person, top to bottom—does the Ritz-Carlton Customer Service training course every year. Our Ritz-Carlton committee meets once a week to see what we can do better for external and internal customers. If the team is happy here, it will reflect out.

Transactional activity is on the upswing. What should new and upgrading aircraft owners keep in mind?



> **Michael Moore, Meridian:**

The number-one issue now is proper crewing of the airplane. Let's just say it's a good time to be a pilot. There are a lot of aircraft entering the market. If you're buying a light or a midsize aircraft, pilots are willing to build time. But when you get into the Falcon 7X or a G550, these pilots have made it to the top. They're not looking to build time. They're looking for a long-term commitment. If an owner wants to operate Part 135 and generate revenue, it's especially important to get ahead of this. [Part 135 paperwork] is a long, drawn-out process.

Owners also need to carefully evaluate any management company they're considering. Do your homework. Show up and talk to people. Ask the right questions: What is your business model? How do you make money? How do you expect to make money off me?

Michael Tamkus, Executive Jet Management:

Our first priority in any partnership is setting realistic expectations and goals for the flight department. We've seen aircraft owners come to us with a desire to resolve issues related to service delivery, crew/staffing, cost controls, and overall client relationships.

We assist in defining goals for the flight operations, the number of hours they want to fly, and the number of hours of charter. New owners are exposed to all the responsibilities involved with owning and operating an aircraft. This can be quite a significant change. Our responsibility is to be proactive about any risk of the aircraft not being available due to maintenance and to avoid surprises. EJM simply wants to create an exceptional experience for informed owners.

Don Haloburdo, Jet Aviation:

The pilot shortage is an ongoing challenge, and it's important to communicate that to new customers, whether this is their first, second, or third aircraft. We hire the best-qualified candidates for our customers. If the choice is an A, a B, or a C, nobody ever says, "I'm totally good with a C," and that requires us to recruit into the marketplace to fill those positions.

The second issue that needs attention is the quality of the overall asset: the aircraft, maintenance records, and the crew. Recently, we brought on some aircraft from operators that had run into financial

difficulties and, in situations like that, maintenance can be an issue. We spared no effort to bring their aircraft up to the standard we expect as an operator and advisor, and that ensures the owner can maximize the value when he wants to dispose of it for another aircraft.

Bill Papariella, Jet Edge International:

Whether you're flying one hour or 400 hours [per year], the fixed costs of ownership are tremendous. So, for most owners, getting the highest utilization possible makes the most sense. That means putting the airplane on a charter certificate and having a charter program developed around the owner's unique usage profile. New owners typically simply want to outsource the hundreds of variables associated with the operation of a multimillion-dollar aircraft.

Underutilization of the aircraft and crew retention are also common issues. The pilot supply-and-demand curve is certainly swinging in one direction, with demand outweighing supply, and that has created a little sticker shock for some owners. We're making sure that being a pilot for Jet Edge provides a good quality of life, with competitive rates, great benefits, and vacation time.

Brian Kirkdoffer, Clay Lacy Aviation:

New owners should get a management company involved as soon as possible during the acquisition, preferably before the aircraft enters the pre-purchase inspection. Otherwise, the company sometimes inherits—and the owner pays for—problems that could have been prevented earlier in the transaction. The prepurchase inspection, for example: the owner may expect the aircraft to be [operated] Part 135, but if the scope of the inspection does not include auditing for Part 135 specific items, that can create delays and added expenses for those owner.

The management company can provide tremendous value in obtaining LOAs [Letters of Authorization from the FAA] quickly to fly internationally, and begin a pilot search before the plane is ready to begin flying. There's a shortage of great pilots, which is creating longer lead times in recruiting top talent. Selecting and involving a management company early is critical so they can have the perfect flight crew trained and ready to fly when the airplane is ready.



When should a company consider outsourcing its flight department operations to a management firm?

> Don Haloburdo, Jet Aviation:

Flight departments should consider their options, including working with a management company, whenever a significant change in their situation occurs, such as a change in the aircraft, mission, or key personnel. Maybe the company needs a larger or more up-to-date aircraft. Maybe you were going back and forth between Chicago and New York, and you suddenly have international business requiring a lot of travel to Europe or Asia. Or perhaps a longstanding aviation director or chief pilot is retiring without a clear succession plan in place. All of these situations should prompt a review of flight operations, including an analysis of the department's resources. Most don't have the scale of operations to staff it in a cost-efficient manner. That's significant when an AOG or other situation arises and you're 12 time zones away from your home base.

Michael Moore, Meridian:

The first thing to consider is the additional oversight when it comes to safety. We all answer to the FAA; we're audited by Argus and Wyvern; we have DOD [Dept. of Defense] audits and we have a mature Safety Management System (SMS) program. All that gives you an opportunity to learn what other aviation professionals think of your systems.

A management company can also save you money. We've sat down with flight departments and reviewed their operations. They might typically have an airplane, a dispatcher, a full-time flight attendant, and a couple of company accounting people. We have a 24-hour experienced flight department, including 10 licensed dispatchers and 20 mechanics. We're constantly updated on the latest procedures; we travel to every NBAA trade show; and we have aviation professionals in marketing, accounting and billing, and oversight. If I'm charging \$150,000 per year to manage that aircraft, I don't think you're doing it for less.

Brian Kirkdoffer, Clay Lacy Aviation:

Efficiency is one factor a company should consider regarding its flight department. Twenty years ago, my answer would have been different, because the industry has matured and the value of a management company is so much greater today. It gets down to scale. You need 25 to 30 aircraft or more to support the people I have, for the payroll to make sense.

Few in-house flight departments have enough scale to provide the level of expertise and cost effectiveness of major management companies.

In the last two years, two flight departments that had operated for over 50 years came to Clay Lacy Aviation for aircraft management. They had a positive culture for five decades and wanted to keep their flight operations in-house. But when they look at the supply-and-demand curve, at some point they say it's not efficient, and recognize they are not getting the same level of experience and oversight a quality management company can provide.

Michael Tamkus, Executive Jet Management:

We've seen many individual and corporate owners transition in-house flight departments to EJM, to maximize efficiencies and risk management and manage the complex regulatory environment. We protect and embrace the corporate culture our clients have built while adding value.

EJM brings economies of scale that drive down the flight department's costs, and we can expand support for the flight and maintenance crew, allowing them to focus on flying their missions. Because we take administrative and business responsibility off the flight department, service and value can improve. We also help owners to develop industry insights and best practices. Our flight-department management takes pressure off the crew and maintenance technicians, allowing them to focus on safety and service to the owner. Everybody wins.

Bill Papariella, Jet Edge International:

There are so many variables that can cause an owner to consider a management company. Top-tier management companies can offer significant economies of scale, safety-management systems, oversight by multiple experts in the field (eliminating single source of failures), specific customized accounting for the operations, and offsetting revenue if operated under FAR Part 135. But for a lot of owners it's an emotional decision, and there's a little concern that the management company will take control. You have to be customizable in your management program, and communicate to your owners that they get the final say, as long as it doesn't put the aircraft in an unsafe situation or violate any FARs. At the end of the day, it's still their airplane.



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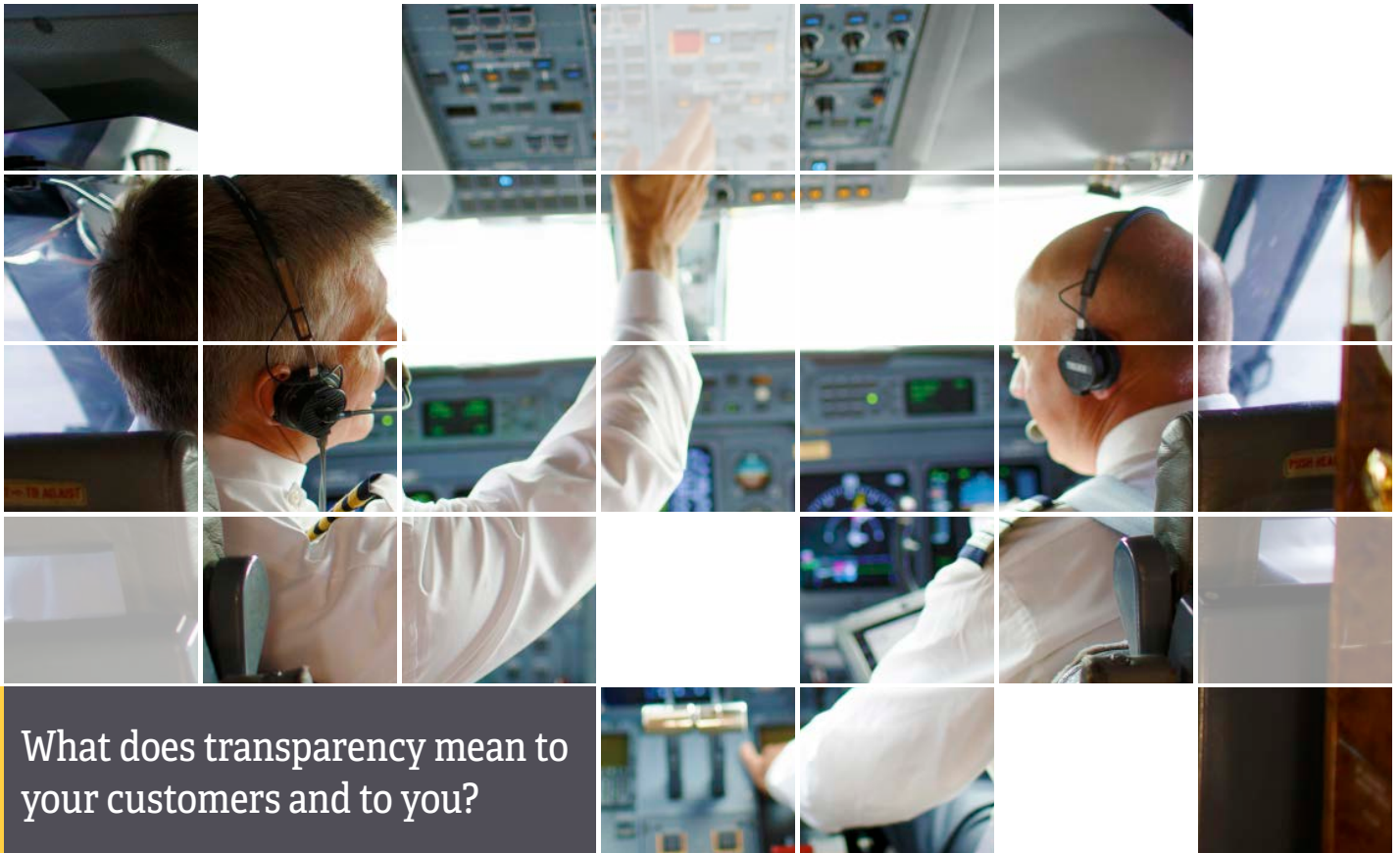
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What does transparency mean to your customers and to you?

> **Bill Papariella, Jet Edge International:**

This business is based on relationships and the owners' trust that the management company has their best interests at heart. Transparency is the key to our business and to the trust Jet Edge instills in our clients. At the outset of our relationship, we clearly define our services, revenue streams, and all other items related to the operation of an owner's aircraft. Our revenue stream is simple: we don't mark up ancillary services. The basis of our revenue is charter commission and management fees. If there's significant charter revenue, the management fee might be lower, and that's part of our communication with the customer at the outset. Our monthly reports are also transparent and customizable with the amount of detail desired. We show receipts for every dollar that passes through our hands.

Don Haloburdo, Jet Aviation:

Today, transparency is of the utmost importance to customers. We offer an online customer portal that we equate to online banking. Customers can see all transactions, with hyperlinks on the statement to all their invoices, and they get a bill at the end of the month showing every penny they spent plus our management fee. We're open to customer audits at any time. Customers often wire several hundred-thousand dollars a month to pay a bill and, if I were them, I'd want to make sure the money was actually paying bills and not just noted on a monthly statement. They can also audit our payments to vendors, money paid into employee 401(k) accounts, and medical benefits. We don't mark anything up—if we

did, it'd be too difficult for us to figure out the billing and way too difficult for customers to understand what exactly they were paying for.

Michael Moore, Meridian:

I think transparency is everything. We give everybody a monthly report of all revenues, all expenses, every receipt, everything scanned in. Some owners want four pages, some want 50 pages. It's important to give them anything they want. Unless I'm traveling, I'm in the office five days a week. We can pull flight logs, look at invoices. If you're doing the right thing all the time, it shouldn't be a problem. Those are the kind of things that build trust, and trust builds your business.

A management company should make a good, honest deal with the owner of the aircraft it's going to manage, and both the company and the owner should feel good. Before the aircraft shows up on the management company's doorstep, the owner should understand if you're marking up, what the markup is, and how the management company is making money off the owner.

Brian Kirkdoffer, Clay Lacy Aviation:

Transparency is more important than ever, but it means different things to different companies. Owners can compare the reporting and access that different companies offer, and the sophisticated owner will see a difference. Our clients have 24/7 electronic access to their account information. They can create their own dashboards and manipulate information, and the monthly statement is customized for them. We watch trends,

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track monthly data, and provide recommendations on any anomalies, and manage toward a goal. That is when transparency really pays off for the customer.

An example came across my desk last week. We track the cost of international data plans, to make sure customers are getting the best rates for their usage. Often, you can prepurchase bundles of data and drastically reduce costs, and because we monitor those costs, we were able to recommend a plan to a client that will save them 25 percent.

Michael Tamkus, Executive Jet Management:

EJM's business philosophy is simple. Our core business is aircraft/asset management for our owners and providing exceptional charter services.

That's it. EJM does not sell maintenance, parts, or fuel or have other sources of revenue. Our revenue comes solely from our management fees and charter revenue we produce for our owners. We provide our owners with our buying power within the industry with 100 percent pass-through transparency. As a wholly owned subsidiary of NetJets, which is a Berkshire Hathaway company, we have financial controls in place to protect our owners, our company, our employees, and Berkshire shareholders. We allow our owners to openly audit EJM and routinely go through internal compliance reviews successfully. EJM's goal is to open up our complete organization to a prospect and for owners to see the true value in our service and our commitment to safety. EJM's level of expertise and support behind every flight segment, every maintenance event, and every owner mission is unique.



Charter revenue is important to many customers. How can they evaluate a management company's ability to generate charter hours?



Michael Tamkus, Executive Jet Management:

When considering a management company, owners should review its ability to not only support flight operations, but to sell trips. Do they have an in-house sales team or do they rely on the broker network? How do they quote and sell trips? How will they present the aircraft to potential charter clients? Do they have data to justify proposed charter volume? How much control do they have in the sales process? We've had owners who've been offered lofty charter revenue guarantees. Owners should routinely review with their management company the progress toward goals. We have over 90 aircraft open to third-party charter, and every owner has unique goals for the flight department. Our objective is to be realistic and open about our progress toward those goals.

Brian Kirkdoffer, Clay Lacy Aviation:

Each client has their own appetite for charter, and it has little to do with the net worth of that company or individual. They either want this to be a working business asset that is creating revenue or reducing cost, or they just want it available for them. We advise clients that there is a benefit to having an aircraft on an FAA Part 135 certificate. It does not necessarily mean it will do a lot of charter, but that it holds the management company to a higher standard. Clay Lacy does not make commitments and promises on charter revenue. Many times, guarantees misalign the interests of the owner because the management company is incentivized to meet the goals, even if it means putting 15 people going to a bachelor party on an airplane. Our philosophy comes from Clay: under-promise and overachieve. We track each owner's goals and make sure to meet or exceed them.



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Bill Papariella, Jet Edge International:

Unfortunately, many aircraft owners are led down a path based on unrealistic expectation regarding charter hours, potential net revenue, and the complications of FAR Part 135 operations. Owners should ask for referrals from other clients with similar mission goals. We have a charter revenue guarantee program, but it has to be the right airplane in the right situation in the right location for us to do it. We are very focused on super-mid- and large-cabin airplanes in the L.A.-New York-Florida market. If the owner doesn't have Wi-Fi, we've gone so far as to install it in exchange for a time commitment to make it attractive on the charter market. We average more than 20,000 hours of charter per year and find that most of our clients want to maximize the utilization of their aircraft. We've got a robust in-house sales team around the country whose sole purpose is to source retail charter for our airplanes. We've also got great relationships with large brokerage firms.

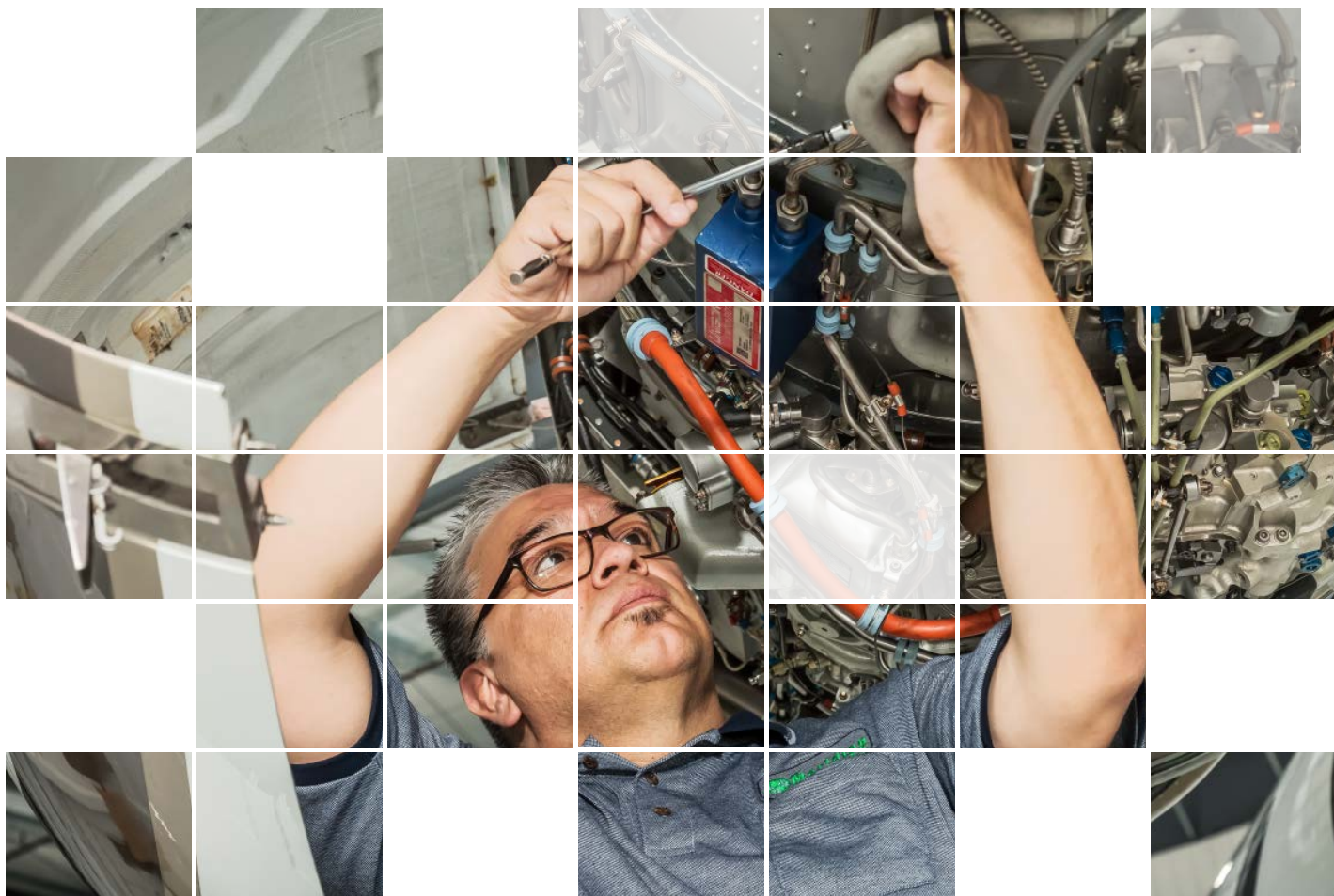
Michael Moore, Meridian:

Do your homework. Every owner has a different philosophy on how much charter they want. If you have a target number, come in, speak to the executive team, the director of operations, the chief pilot, the

marketing guy. If they spoke about an impressive number of hours they put on an airplane, ask how they did it. Meridian has an inside sales team, and more than 50 percent of our charter is retail rather than wholesale—we reimburse the owners the same either way. Crewing is also an issue. If you own a GIV and want to put 400 hours of charter on it, give me three to four crewmembers and there's no problem. With two pilots, it's much more difficult.

Don Haloburdo, Jet Aviation:

In our world, we'd rather have a relationship with the customer where they say, "This is what we're looking for" in terms of charter hours, and we work toward that together, instead of providing guarantees. There are differing levels of expectations people have when putting aircraft out for charter. Some aircraft are on "look and book" status—we look at the schedule and if nothing conflicts, [the aircraft] goes out for charter under a prearranged agreement. Some owners have requirements for what trips they'll accept for charter, and some owners may need a specific portion of overall commercial activity to realize a tax or other benefit. If charter revenue is important, ask the management company about their customers' goals for number of hours, and what has been delivered over the past 24 months.





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As the largest aircraft management and charter company in the world, our infrastructure and experience allow you to take advantage of unmatched industry savings and state-of-the-art technology you won't find anywhere else. But it's our people's focus on the little things that makes your experience with EJM exceptional.

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John Terzian

How did you start flying privately?

I used to be scared to death of flying, and the main reason I got over it is because I have to fly so much. A lot of my meetings are in Vegas because we are doing projects there and my board is there. I'll have to be in New York for an event, then be immediately back in L.A. I have a [nightclub] in Aspen, a restaurant in Chicago. The more I can cut down on time, the better. And flying private cuts all of that extra time out. It makes business 10 times better.

What providers are you using?

I primarily use JetSmarter [as a member who purchases seats and also sometimes charters the whole airplane], and I have been very happy, because they act fast. A lot of times I need a flight for myself or a client right away. I have also used NetJets [via its Executive Jet Management subsidiary] for charter. And I use charter brokers. When I am booking a plane for a client, we need to move quickly. If one broker isn't coming through, I jump to the next one.

What is a typical day like for you?

I am up by 7:30. All day I am working on current projects or new business. I take a few hours off before I have a [business] dinner, and then I try to go to at least three of our places. I am usually home around 2 or 2:30 a.m., and I try to take Sundays off.

Isn't that a tough routine?

I thrive on it. It's actually not hard for me at all, but I am married, so it is hard on someone else, and I have had to be conscious of that.

How did you get started in the restaurant business?

When I was at USC, they had me recruit for the football team, and I was very good at it because I love people. I started mixing friends from high school, friends from

college—I would get people together to some restaurant I knew, and I ended up turning that into a promoting business and it grew really big.

Were you making money doing that?

The funny thing is, I never planned on making money, but then restaurants and clubs started paying me to bring people in. That turned into [my doing] events at colleges—promotions and stuff that are big on college campuses now but were new at the time. I planned on doing this, which is why I went

to law school. But doing these parties was so natural for me. It was like creating art. I actually had gotten into college on an arts scholarship and I chose not to [pursue it].

Why not?

I think I had it in my head that I had to learn business, but when you're an artist you just don't have that mindset. I wasn't good at law school, but I graduated, and when I got out no one would hire me. I was looking into entertainment, I was looking at anything. I [helped start] a nightclub called LAX. I was mopping floors, doing the cash, doing the legal work, everything—which was good because I saw every aspect of [how to run and brand] a club.

“It's very easy to get some power, get an ego, and then basically lie, cheat, and steal to get to the top.”

Soon after, I realized that I'm an entrepreneur, and I'd rather live and die by my own sword. I had a friend who grew up with me in L.A. and went to USC, and I finally convinced him to start a very cool place with these Warhol factory windows, and we spent three times as much as we should have because we didn't know better. We brought so many crowds that the city shut us down, declaring us a public nuisance. I was pretty young and brash. Neighbors complained, and the police were a little shady. I also had another place called West Palm, which was down the street. We had a business partner there that was embezzling from us, so we got hit with everything in the span of two years.



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John Terzian

There is reportedly lots of corruption in the nightclub business.

There is, and I refuse to [partake in] that. The way I have separated myself—to whatever degree that I have—is by being aboveboard. I think sometimes people see ruthlessness get rewarded or hear glory stories about getting to the top by any means. I don't think you need to do that. It's very easy to get some power, get an ego, and then basically lie, cheat, and steal to get to the top. You can't be a pushover, but that doesn't mean you need to cut corners or be awful to people or cheat the system.

How did you bounce back after the initial failures?

I had to move back home with my parents, and I was at the lowest time of my life. I had not a dollar to my name and I had lost millions of my friends' and family's money. But what's crazy is that as down and depressed as I was, it never crossed my mind to leave this industry that I love, because the one thing that I knew I had that others didn't was the ability to bring people together in one place. I just didn't have the business side. I had to recognize that I needed to surround myself with people who did [have that knowledge] so I could do my thing—which is to create.

The first place to really turn for us was Shorebar, in Santa Monica. I was so scared—and still am—from those early failures that I was extremely careful in the way I operated it.

What are the pitfalls of opening a restaurant or bar?

It's easy to get carried away with [too many] employees and a bunch of excess fat that you don't need, and that's a hard lesson for people to learn.

Do you walk into a problem every night at the clubs?

Every night. I am pretty much putting out fires constantly. To help eliminate some of that, I am [hiring excellent] people and putting them in high-level positions under me. That way I can focus on making sure our concepts stay strong and our core customers are happy. Because we are like a family, the way we treat our customers.

I have people that eat at my places four, five nights a week.

Is the customer always right?

Aside from illegality, I don't say no to a client. Not only is it never a no, I actually go overboard to try to surprise them. It's a people business.

How do you keep a level head?

I have a very tight, small circle of close friends—people I grew up with from forever. Some of the bigger celebrities I knew prior to them being famous. At the end of the day, [celebrities] are just working people.

You are known for giving back to the community.

Charity has always been a big part of me. I used to volunteer my time, but now I have less and less time, so what I am doing is raising money for charity. Three or four years ago I realized that I couldn't do everything and I had to focus on a few key organizations. For Imagine LA [which combats homelessness and poverty in Southern California] I created the Magic Ball, and this is our fourth year. It's supposed to be the anti-chicken dinner—it's like a fun concert but you know you are giving money toward this great fund. I also do quite a bit with the Los Angeles Children's Hospital, an absolutely amazing place for very sick kids. I help them with guest celebrities for raising money for their gala or other things as they need them—playrooms and stuff like that.

Do you have any kids?

Not yet. But drunk people at 2 a.m. are basically like kids!

Do you always stay sober?

I do, for the most part. It's not that I don't drink. It's just that I'm out every night and every morning—you can't really be drunk. I don't think anyone's ever seen me drunk, except maybe my wife.

Jennifer Leach English (jenglish@bjtonline.com), BJT's editorial director, interviewed Jet Aviation's Rob Smith for our August/September 2017 issue. This interview has been edited and condensed.



Above, John Terzian with managing partner Brian Toll. The two are planning to add another half dozen or so restaurants and clubs to their portfolio as well as a hotel brand. Below, Terzian with TV host Larry King and actor David Arquette.



PHOTOS: COURTESY OF JOHN TERZIAN

FASTFACTS

▶ **NAME:** John Terzian

▶ **BORN:** May 8, 1980 (age 37)

▶ **POSITION:** Cofounder of Los Angeles-based hospitality & lifestyle firm the h.wood Group, which owns Bootsy Bellows in Los Angeles and Aspen, Colorado; the Shorebar in Santa Monica, California; the Nice Guy, Delilah, Petite Taqueria, Poppy, and the Peppermint Club in West Hollywood; and the Blind Dragon in West Hollywood and Dubai.

▶ **TRANSPORTATION:** JetSmarter, Executive Jet Management, various other charter providers

▶ **PHILANTHROPY:** Imagine LA (board member), Children's Hospital Los Angeles Sports & Entertainment Board (co-chair)

▶ **PERSONAL:** Married to Loni Terzian

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FREEDOM OF FLIGHT

Lessons from Zetta Jet's collapse

A high-flying charter operator goes under, fueling bizav turbulence while providing a cautionary tale.

by James Wynbrandt

It will take time to sort through the wreckage of Zetta Jet, the two-year-old charter operator that went bankrupt late in 2017. Its failure occurred amid charges of malfeasance and corruption that raised questions about auditing services, aircraft brokerages, the sanctity of large sums left on deposit, and the FAA.

In case you just tuned in, Zetta Jet, which was headquartered in Singapore, enjoyed spectacular growth, providing global charter on a rapidly expanding all-Bombardier owned-and-operated large-cabin fleet. Last September, the company, which maintained a California office, filed a lawsuit in a U.S. district court accusing ousted managing director Geoffery Cassidy of misappropriation of funds and fraud; Zetta Jet also filed for Chapter 11 bankruptcy protection. The bankruptcy court turned down the company's reorganization financing petition in November, forcing it into liquidation, with millions of dollars in customer deposits and unpaid vendor goods and services likely lost.

Did mismanagement, misappropriation, or a failed business model bring down Zetta Jet? While courts, regulators, and forensic accountants look for answers, business aviation users can draw immediate lessons from the flameout. Among them:

FAA surveillance might not be adequate. Your charter aircraft

and flight are supposed to be operated under FAA Part 135 rules, which are more stringent regarding maintenance, crew training, procedures, and other requirements than standards that govern Part 91, or private, non-revenue flights. In his 2015 National Transportation Safety Board accident report on a fatal Hawker 700 crash attributed in part to the operator's "casual attitude toward compliance with standards," NTSB member (and now chairman) Robert Sumwalt



wrote that customers likely expected "the FAA [would] provide adequate surveillance" of the operator. However, the agency's "insufficient oversight" meant such expectations "were based on a house of cards that created an illusion of safety."

In the Zetta Jet collapse, charges and countercharges include claims that the company operated charter flights under Part 91 rules (albeit in Europe); that it was a majority foreign-owned company in contravention of FAA rules; that the agency was aware of the foreign

ownership; and that the company had undue "control" over personnel in the FAA's Flight Standards District Office (FSDO) that had responsibility for its oversight.

Asked for comment, an FAA spokesperson said that the agency "increased its surveillance of Zetta Jet after the company announced bankruptcy...[and has] asked Zetta Jet to surrender its operating certificate." The FAA is investigating a number of allegations about the company, its ownership, and its operations.

Be careful about which brokerages you work with when selling aircraft. Zetta Jet's lawsuit alleges that brokerage firm Jetcraft, which supplied jets the company operated, funneled some \$2 million per aircraft to Cassidy in illegal kickbacks, costing Zetta Jet between \$14 million and \$18 million, an allegation Jetcraft denies.

Aircraft brokers, once accorded no more respect than used-car dealers, have made strides in recent years in establishing the field as a professional service that adds transactional value and recognizes common ethical standards. The National Aircraft Resale Association, whose members include Jetcraft, exemplifies the success and aspirations of this effort.

Still, aircraft sellers should be careful to work with brokers that have pledged to uphold high ethical standards, rather than questioning the validity of their commitments.

You can also take comfort in knowing that the majority of aircraft transactions today are fee-based, leaving little reason for manipulating prices on the buy or sell side.

Safety audit firms have internal controls to prevent data manipulation. Responding to Zetta Jet's charges against him, Cassidy claimed the company's "director of sales was bumping and adding not only blindly but falsely [flight] hours to pilots, in order to pass Wyvern and Argus trip checks."

Both auditing services say internal controls prevent such manipulation, however. Joe Moeggenberg, Argus International's founder, president, and CEO, says the company has "very good processes in place to make sure we don't get into a situation where the operator is providing us with bad data."

Ed Wandall, Argus's director of charter evaluation and qualification, says the manager identified by Cassidy "has no access to the system. Our system is gated with user name and password." Argus also checks "significant" operator-supplied type ratings information against the FAA database. "What we found with Zetta Jet specifically, [there were] a lot of updates of pilots and flying [time]," Wandall says. Where questions arose, Zetta Jet was "responsive" and "pretty much complied" with requests for logbooks or other documentation.

"We have questioned them on multiple updates just like we would with everybody," Wandall adds.

Art Dawley, CEO of Wyvern, says, "The overwhelming majority of companies registered in our system—including Zetta Jet before they went out of business—provide automated data feeds of all pilot and aircraft times through their fleet and pilot-management systems. Algorithms built into our data platform are designed to detect unnatural changes in pilot hourly experiences and, with few exceptions, we have not determined this to be an ongoing problem."

Insist on an escrow account—and keep an eye on costs. Block-charter programs and jet cards require you to put large sums on account. The Zetta Jet experience serves as a reminder that this money typically funds operations, rather than being held in protected accounts. Besides

performing due diligence on the financials of any card or block-charter provider you consider working with, find out whether it has provisions for establishing escrow accounts.

Setting up an escrow, or segregated, account is at least as important for aircraft owners working with management companies, says Stephen Hofer, founder and president of Aerlex, an aviation law firm. Most management agreements require clients to have two months of operating expenses on account, a sum that can easily reach into six figures for large-cabin jets. "The paperwork associated with a true deposit account can require a lot of time and effort and additional expense," Hofer admits. "A management company will do it, but not for free."

But the effort is necessary, Hofer says, and moreover, "you need to insist that the manager provide you with real evidence that the costs being incurred by your aircraft are being paid. A management statement that says, 'We took in this [revenue] in charter, and here's your expenses' doesn't prove anything unless they back that up with documentation."

The concern, says Hofer, is that if the management company gets behind and doesn't pay for goods and services for which you advanced money, you could face a double whammy: "Liens could be accruing that you'll have to pay to clear title to your aircraft," Hofer explains. "It's not just enough to do due diligence in the beginning; you need to do it on an ongoing basis." **BJT**

James Wynbrandt (jwynbrandt@bjtonline.com), a multi-engine instrument-rated pilot and regular **BJT** contributor, has written for the *New York Times*, *Forbes*, and *Barron's*.

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Score the best aircraft financing deal

Here's are your options, along with expert advice on how to proceed.

by Jeff Wicand

The past couple of years have been tough for business jet manufacturers. Sinking prices for preowned aircraft have turned buyers away from costlier factory-new models. This in turn has caused the manufacturers to lower prices; even Gulfstream, which for a time stood firm on its “fixed prices” for newly introduced models beginning with the G650, has started negotiating purchase prices. Attractive valuations have caused some preowned markets to be picked over, a trend that should eventually help send jet buyers back to the airframers.

Falling prices have also proved challenging for business jet financiers, who would prefer to see values hold up (generally, a vain hope), or at least decline at slower rates. For lenders, jets are collateral, and for leasing companies, they're assets on the balance sheet that must eventually

be sold. At banks and finance companies with underwater business jet portfolios, appetites for swallowing more jet financings have abated, which in some cases has led to a renewed focus on financing aircraft for existing clients rather than for all comers, a position encouraged by the new Basel III banking requirements.

Other lenders, such as GE Capital and CIT, have sold off their jet financing portfolios to new entrants in the market like Global Jet Capital and Stonebriar Commercial Finance, which are looking for an easy way to jump-start their business in this field, and other financial institutions may do the same. As always, however, there are plenty of new entrants to the business jet finance world, including more regional banks in recent years. You can still get financing at JP Morgan Chase, Citibank, and Bank of America, but you

can also try First Interstate Bank (formerly Bank of Cascades), UMB Bank, Ally Bank, Seacoast Bank, Enterprise Bank, Bank of the Ozarks, and others, especially if your aircraft is relatively small and inexpensive. For lenders like these, jet financing is a high-profile opportunity to attract or keep prestigious individual and business clients with excellent credit by offering low rates based on a low cost of funds. It can also be an opportunity to help diversify the bank's asset finance portfolio.

Jet finance, however, also offers the chance to make ill-informed value and residual assumptions in what amounts to a specialized field. But experienced help is available, though personnel changes at many institutions mean that the veteran jet finance professional you worked with a few years ago may not be the same one you meet with today.

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Aircraft Finance

The decline in jet values has contributed to an uptick in lease rate factors—the percentage of the “lessor’s cost” for the aircraft that the lessee pays every month. It also reflects a growing wariness among financiers, especially banks, to write aircraft leases at all. One bank lender told me recently that it would write a lease these days only to move an aircraft in its own inventory.

Loan rates, on the other hand, seem to be holding steady, and the experts I’ve spoken with lately don’t see any dramatic future increases in their crystal balls. It’s possible for borrowers with the right credit at the right banks to finance an aircraft loan at around 2.5 percent per annum (floating) or 3.5 percent per annum (fixed). Loan-to-value ratios continue their conservative trend, with some lenders quoting 75 to 80 percent for recourse financings—though 90 percent is still typical and 100 percent financing remains available for borrowers with outstanding credit from the right lender. Amortization schedules have likewise been declining; some lenders are now asking for 10 to 12 years on older aircraft, and 15 years is starting to sound like a good deal, though 18 years or more can be achieved depending on the financial institution, age of the aircraft, and projected usage.

There are five basic business jet financing options: operating lease; synthetic lease; recourse loan; non-recourse loan; and cash. What’s the right choice? In recent years, cash has been the most common way to buy a business jet, ostensibly because there is too much cash available for good investment opportunities. However, jet buyers who have better things to do with their money than tie it up in an aircraft should seriously consider financing. Even if you already own a jet, you can always borrow against it or do a leaseback with a financier (unless it’s too old or has unusual or worrisome problems).

Recourse loans remain a popular strategy. Subject to prepayment penalties in the early years, they’re relatively easy to get out of if you decide you want to upgrade, downgrade, or give up owning an aircraft altogether. However, the loans are called recourse because the bank has recourse—and not just your aircraft, but your credit. This will often require a personal

guarantee of the credit obligation from the principal of the borrower. Further, in a recourse loan, though the borrower owns the aircraft and gets the advantages like tax depreciation that go with it, it also accepts all the perils (like the possibility of plummeting residual value). Recourse loans are arguably not for the risk-averse.

Some of these dangers can be mitigated by a non-recourse loan. The recognized industry leader here is PNC Bank, which offers a variety of “asset-based” aircraft finance products keyed off the borrower’s loan-to-value ratio choice. For example, if you’re willing to borrow only 50 percent of a jet’s value, you can get a loan with no amortization, no personal guarantees, and no financial disclosure...but with a lien on the aircraft. On the other hand, if you borrow 80 percent of the jet’s value, you can still eliminate the financial disclosure, and recourse is limited to 20 percent. Needless to say, interest rates are higher

Loan rates seem to be holding steady and experts don’t see any dramatic increases coming soon.



for these asset-based programs, but not as much higher as you’d expect.

The best way to dodge the risk of falling jet values is to choose an operating lease. The popularity of aircraft operating leases is on the wane with banks for the same reason they are popular with many jet buyers: the lessor bears the brunt of residual risk. Given changes to lease accounting rules that compromise off-balance treatment of leases, minimizing residual risk is an ever more important reason aircraft buyers choose leases. Leases also remain popular with buyers who cannot enjoy the tax advantages of aircraft ownership.

Of course, a lessee is still required to maintain the aircraft, fly it no more than a certain number of hours per year, and deliver it back to the lender in good condition (which usually involves specific maintenance requirements) when the lease is over. Potential jet lessees should also keep in mind the loss in flexibility compared with loan financing—in particular, the difficulty in getting out of the lease whenever you want to. [See “Exit Strategies,” August/September 2017, available at bjtonline.com.—Ed.] In addition, lessees must think twice about paying for expensive (and often needed) upgrades to the aircraft for which they may receive no financial credit from the lessor.

As banks lost interest in financing traditional aircraft operating leases, they resurrected the synthetic lease. Traditionally, this was a strategy to allow the lessee to write off the aircraft for tax purposes (and treat the lease payments as debt payments) while retaining off-balance-sheet treatment for accounting purposes by flunking accounting rules that would make the lessee the aircraft owner. Accounting rules changed and synthetic leases fell out of fashion, but they currently provide an opportunity for banks to write a lease with the lessee taking on the risk of declining jet values.

When looking for the best loan terms, high-net-worth individuals should start with their private bank. It likely already has a security interest in physical assets (the house, the boat, more houses) and investment accounts, so adding the jet can be relatively easy. Some private banks are so comfortable with the collateral already in place that they forgo putting a lien on the aircraft altogether. The drawback of

private bank financings is cross-collateralization, which may allow the institution to foreclose on your aircraft because of defaults elsewhere in the portfolio—or on your other assets in the case of aircraft loan defaults.

If a private bank isn't an option, to get the lowest possible rate, you may still be better off with a commercial bank. A bank lending deposits has a lower cost of funds than a finance company obtaining money from investors or commercial paper. But the finance company is more likely to be flexible in structuring the loan to achieve objectives such as 100 percent financing, a lengthy amortization schedule, ability to prepay without penalty, and the like—not to mention leasing the aircraft. Further, while a private banking relationship works to an individual jet buyer's advantage, a commercial banking relationship with a company can work to the company's disadvantage if the bank already thinks it has too much exposure to the business from existing credit facilities.



Finance companies are often a good place to look for lease financing. I've seen aircraft leases from private banks, but they're extremely rare, and are becoming rarer from commercial banks as well, so finance companies are picking up the slack. Since the financial institution will own the aircraft, it will be picky about the terms. Obtaining a lease of less than five years will be difficult and securing one for less than

three years will be almost impossible (unless you're leasing the aircraft from a bank that just took it back from a lease and wants to postpone recognizing a loss on a sale). Though interest rates often inch upward the longer the term of the facility, lease financing rates often go down, so pricing may be more attractive on a 10-year lease than on a five-year one. Early buy-out options (EBOs) offer an opportunity to get out of the lease, but they can also drive up the lease rate. To find out how much, ask for proposals both with and without EBOs.

Speaking of proposals, if you're undecided between loan and lease financing, request proposals for both. Even if you've made up your mind, and even if you have a relationship with a bank, it's worth getting several financing alternatives to validate your intended choice. **BJT**

Jeff Wieand (jwieand@bjtonline.com) is a senior vice president at Boston JetSearch and a member of the National Business Aviation Association's Tax Committee.

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PNC's Alex Overstrom

The man in charge of aviation finance at industry-leading PNC discusses changes in the field.

by Mark Huber

Alex Overstrom, who is head of aviation finance for PNC, seems to have inherited a penchant for a career in finance. His late father, Gunnar S. Overstrom, Jr., was vice chairman of FleetBoston Financial and the former president and COO of Shawmut National Corporation. His older brother, Gunnar Overstrom III, runs a hedge fund.

Alex Overstrom received his A.B. in public policy from Duke University and then joined Goldman Sachs, where he spent eight years, including 2008, when the market meltdown occurred. He joined PNC in 2014 and assumed his current position in January 2017. Prior to that, he was the firm's COO of corporate and institutional banking with responsibility for data infrastructure and data quality, CRM and sales reporting, analytics and strategy, business communications, environmental and social risk management, and client and employee experience.

PNC has more than 500 aircraft in its portfolio and Overstrom

is optimistic about the future of business aviation and related financing. "We have made more business aircraft loans than any other firm each year since 2009," he says. "We think there is room to grow our market share, given the strength of our platform."

Overstrom doesn't believe the bizav market is likely to return to the fat days of the mid-2000s anytime soon, however. He says that airframers are still "in a tough spot, as [used aircraft] price declines have made new aircraft less competitive with preowned." He adds, though, "that we are still financing a decent number of new aircraft, particularly with large corporate clients, who are often leasing. I expect that the used-aircraft market will remain robust while new aircraft will be challenged over the next 12 to 24 months. As used-aircraft inventory declines and prices rise, and OEMs bring production to lower levels, [the industry] should begin to get back closer to an equilibrium state."



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Your father was a very accomplished business and community leader. What did he teach you?

I was incredibly lucky to grow up in an amazing and loving family, but I had only 17 years with my dad. It was enough, however, to see two things that have stuck with me. First, people deserve to be treated honestly, decently, and with at least an initial presumption that they mean well. Second, integrity and your values are ultimately what matter. They're what define you.

You studied public policy at Duke as opposed to business. Why?

I wanted to improve my decision-making skills. Duke's public-policy program was grounded in decision theory: how analysis can and should lead to change. It combined political science, economics, and policy into something that felt tangible to me. It also involved lots of reading and writing, which I enjoyed. I don't think people in finance appreciate this, but the ability to write well is important. Finally, I thought—given my interests and what my dad and brother did—that I'd end up working in finance, so I wanted to do something different first.

What are some of the most important books you've read?

Innovator's Dilemma, by Clayton Christensen, is one I return to often as a way to force myself out of the practice of viewing ideas and opportunities

through the lens of a large financial institution.

Basically, to not look at new or different opportunities simply against our current customers, product sets, or financial performance, but instead try—and it can be hard and unnatural—to think about them in terms of what might be, whether that be entirely new markets, new clients, or new business architectures.

One book I read recently is *Principles*, by Ray Dalio, who runs the largest hedge fund in the world, Bridgewater. The book gives good insight into a corporate culture that is very different from most—one designed around truly embracing reality and being what Dalio describes as “radically transparent.” Some of it is fairly extreme and probably works only in the small, tightly designed culture that Dalio has created at Bridgewater, but the essence of it resonates with me: if you don't embrace reality—the good things and, more importantly, the things that aren't so good—you can't grow or get past them. Most people fight reality when it's not what they want it to be, but that is the biggest impediment to growing, and that applies to us individually as well as to our businesses.

You were at Goldman Sachs through the 2008 financial crash. What did that experience teach you about financial markets?

I was 25. It was a stark way to start my career. It taught me a lot about the cyclical nature of markets and



“As the market heats up, buyers are taking the better-priced and better-vintage used aircraft off the market and driving up prices, which eventually will make the decision to go preowned less attractive.”



the economy, the need to remember that no matter how good or bad things may feel at a particular point, it's a cycle and it will turn. Perhaps the most dangerous phrase in the English lexicon is "this time is different."

Over the last decade, there has obviously been some tightening in loan qualification requirements. But has there also been a leap in the data that lenders track on underwritten assets and are they quicker to pull the trigger when things look askew?

Data is important. And we are increasingly using it in ways that benefit us and our clients. Think about consumer loans: these typically have been underwritten looking at FICO, but that can leave some borrowers underbanked. So we're working on using data and analysis of payment flows and deposits to look beyond FICO and expand our lending pool. Within our business, we look at our portfolio's performance constantly—and we look at trends to understand what's driving performance or underperformance from a credit and asset perspective. We're always looking for ways to improve, but we're also out talking to clients, because that's just as important.

Conversely, you spend a lot of time and resources hosting industry events and relationship building. In today's banking environment, is there any place for judgment and intuition, or are decisions always solely data-driven?

Our whole philosophy is to build meaningful, longstanding relationships with our clients and partners. For our partners, whether those are the leading broker dealers, the OEMs, or other players, we have the opportunity to help them deliver for their clients. And those relationships are incredibly important to us. So we spend a lot of time with those partners, understanding their needs and helping them understand our model and how we evaluate risk and return.

The stock markets have been on a tear this year, but new-aircraft sales aren't as robust as one might expect in this economy.

It's a classic case of supply and demand. There has been a glut of aircraft in the market for a long time—we're just now beginning to normalize—and that has driven down prices on preowned aircraft to the point where buying a lightly used plane can



be a very rational decision versus buying a new plane. As the market heats up, buyers are taking the better-priced and better-vintage used aircraft off the market and driving up prices, which eventually will make the decision to go preowned less attractive.

What major changes have there been in aviation finance over the last few years?

The market has become more competitive. We're seeing new entrants—banks as well as less-regulated institutions. Leasing has gotten a bit more attractive, as some of the firms that had been bigger players in the leasing space have pulled back after taking residual losses. That's created a bit more rationality in the market, and as a result we've done more tax leases this year than ever before. Also, asset-based lending products, which require limited or no recourse or disclosure, continue to be attractive to customers, and as the only bank offering the product, we've seen significant demand for that form of financing from borrowers with complex financials—think hedge-fund owners, real estate developers, and those that really value their privacy. It's also a loan that we can execute in as little as two weeks.

When you joined PNC Aviation Finance, what was your immediate goal and what strategy have you executed to attain it?

This already was a phenomenal business, so the question for me was, how do we take it to the next level? One goal was to grow our share of large-cabin transactions as our asset-based product has historically skewed towards the mid-cabin space. Also, build on the excellence of our asset-based platform, which allows us to lend up to 80 percent loan-to-value on a limited or non-recourse basis, with limited financial disclosure. What's great about this product is its flexibility, and also how quickly we can close and fund for our clients. **EJT**

RÉSUMÉ:

NAME: Alexander Overstrom

AGE: 33

POSITION: Head of Aviation Finance, PNC, 2017–

PREVIOUS POSITIONS: COO, Corporate & Institutional Banking, PNC, 2014–2016; investment banking and firmwide strategy roles, Goldman Sachs, 2006–2014

EDUCATION: A.B., public policy, Duke University, 2006

PERSONAL: Married with four-year-old daughter and two-year-old son. Lives in Pittsburgh, Pennsylvania. Enjoys tennis.

Mark Huber (mhuber@bjtonline.com), an aviation industry veteran, has reviewed aircraft for **BJT** since 2005. This interview has been edited and condensed.

FACTORY-NEW
AIRCRAFT

Airbus ACJ neo

The next generation of Airbus Corporate Jets offers greater fuel efficiency, the latest technologies, and significant range improvements.

by Mark Huber





Airbus plans to deliver the first copies of its next-generation Airbus Corporate Jet (ACJ) later this year. The ACJneo is a derivative of commercial jet models that have been coming to market since January 2016 and that reflect the airlines' slavish devotion to finding new frontiers of efficiency. Per-passenger-seat-mile cost is the premier measurement for this doctrine and the aircraft with the lowest number wins. Besides delighting passengers with daily recreations of the Walmart Black Friday experience at 37,000 feet, airlines are constantly in search of ways to burn less fuel.

So, in 2010, when Airbus announced the "new engine option" (aka "neo") program for its narrow-body jets—the A321, A320, and the A319—concurrent with the promise of 15 to 20 percent fuel-efficiency improvement, lower emissions, and less noise, the airlines and their leasing companies ran to it at full gait, ordering more than 5,200 of the airplanes through October 2017. To give you an idea of the magnitude of this development, consider the following: since 1988, Airbus has delivered around 7,500 legacy narrow-body aircraft and since 1974 it has sold around 2,070 wide bodies. "Neo" became the future of the company. Airbus and Boeing attract much attention with prestige programs like the former's A380 jumbo jet and the latter's 787 "Dreamliner," but it is the sale of the lowly, ubiquitous narrow-bodies that largely pays the bills.

Airbus opted to offer customers two engine choices. The first is the Leap-1A from CFM International, a 42-year-old consortium between GE Aviation and France's Safran that spawned the enormously successful CFM56 series of jet engines. The Leap builds on the CFM56's technology but makes important improvements, including a redesigned combustor, more advanced materials such as ceramics and carbon fiber, a bigger intake fan, a more complex turbine setup, and the ability to operate at higher temperatures and higher compression ratios that increase the engine's thermal efficiency.

What all this means is more thrust with less fuel. By building on the CFM56, the consortium is basically offering airlines a known quantity, and that is reflected in their engine preference to date, with the Leap specified on more than 60 percent of neo orders.

A few of the Leap engines delivered to date have experienced problems related to peeling of the ceramic coating on the engine shrouds, but that is relatively minor compared with the teething pains of the program's other engine

**FACTORY-NEW
AIRCRAFT**



2018 Airbus ACJneo at a Glance

	ACJ319neo	ACJ320neo
Price (estimated)	\$85 million	\$95 million
Crew	2-4	2-4
Passengers (typical)	8-19	8-25
Range (NBAA IFR reserves)	6,750 nm	6,000 nm
Maximum cruise speed	Mach 0.82	Mach 0.82
Maximum takeoff weight	166,400 lb	172,000 lb
Cabin	Volume	5,843 cu ft
	Height	7 ft
	Width	12 ft 1 in
	Length	78 ft
	Baggage	222 cu ft
	650 cu ft	

Source: Airbus

choice, the Pratt & Whitney PW1100G geared turbofan. A geared turbofan (GTF) relies on reduction gears at the front of the engine to slow the fan, making it potentially even more efficient than the Leap. Slowing the fan speed also reduces noise and vibration. However, this can require a larger fan than a conventional design. The fan on the GTF for the neo is in fact three inches larger than the one on the Leap. While GTFs are not new—they were previously employed on the Lycoming ALF502 and the Honeywell TFE731 for commuter and business jets—using them for engines this size and a program with such breadth presents technical challenges and risks that manifested themselves on early deliveries. By this summer more than 40 percent of the neos that had been delivered with GTFs were grounded during one week due to faulty oil seals, combustor liners that degraded faster than expected, main gearbox failure, and a shortage of fan blades.

Airbus CFO Harald Wilhelm publicly bemoaned the “number of in-service issues”

with the engine. “Demonstrated performance with the engine is not satisfactory,” he said last summer. Even a senior Pratt executive, Rick Deurloo, vice president of sales and marketing for commercial engines, was forced to concede that the problems were “causing a lot of unplanned [engine] removals by our customers.” And in late October, Greg Hayes, the CEO of parent company United Technologies, acknowledged that GTF problems were causing too many aircraft to be “on the ground for unacceptably long periods.” Pratt has been working to fix these problems, however. The

number of grounded A320neos has dropped by half since December, and Airbus now delivers as standard the two fixes for problems suffered by the engines.

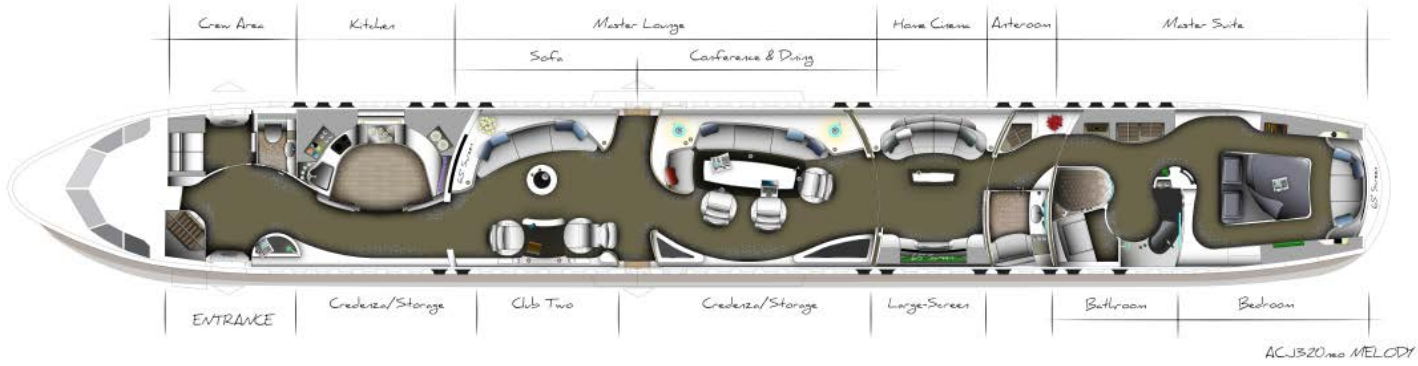
To date, Airbus has orders for six ACJ320neos and three of the shorter ACJ319neos. The aircraft will come with the customers’ choice of engines and wingtip sharklets that cut drag and improve fuel efficiency. While Airbus does not reveal exact prices, a company spokesman said the tab will be around \$95 million for the ACJ320neo and \$85 million for

CORRECTION

The article on the Embraer Legacy 500 in our last issue included incorrect numbers for high-speed cruise and maximum takeoff weight. The correct figures are Mach 0.82 and 38,360 lb, respectively. —Ed.



S. RAMADIER



the ACJ319neo. That’s with an average interior. Still, with a watchful eye on costs, you should be able to buy either aircraft and complete it with a nice cabin for under \$100 million.

Both models offer fly-by-wire controls, advanced avionics, and significant range improvements over their legacy predecessors. The ACJ320neo can transport 25 passengers more than 6,000 nautical miles, a big jump from the 4,300-nautical-mile, eight-passenger range of the ACJ320. It can fly nonstop from London to Johannesburg or Los Angeles to Tokyo and typically accommodates 19 to 25 passengers.

The ACJ319neo cabin is commonly configured for 19 passengers, and the aircraft has a range of 6,750 nautical miles—more than 600 nautical miles better than the legacy ACJ319, with eight

passengers, albeit at a relatively pokey Mach 0.82. But you’re paying for comfort, not speed. The cabins on the ACJ320neo and ACJ319neo are about 12 feet wide; the former is about 90 feet long, while the latter is 78 feet long.

Last year, Airbus unveiled an interior concept for the ACJ320neo called “Melody” that features light colors, curved lines, an acoustically tuned cabin with three 65-inch curved entertainment monitors, an oversized main lounge, and a real kitchen. The Atelier Pagnani Automobili design house has schemed an ACJ319 interior with a “sky ceiling,” a generous amount of cabin curves, and cabin partitions that can change from clear to opaque electronically. The layout of the 950-square-foot cabin features separate cinema, dining, and lounge

areas. An improved environmental-control system lowers the cabin altitude to 6,400 feet at cruise flight on both aircraft. Better efficiency means both airplanes can carry less fuel and that leaves a lot more room for baggage: 650 cubic feet on the ACJ320neo and 222 cubic feet on the ACJ319neo.

Whichever neo narrow body you choose, you can be assured of lower fuel burns, the latest technology, plenty of room to stretch out, and an overall level of decadent comfort that only airplanes this size can provide. Walmart Black Friday they’re not. **BJT**

Mark Huber (mhuber@bjtonline.com), an aviation industry veteran, has reviewed aircraft for **BJT** since 2005.

“Project” airplanes

A fixer-upper can offer great value, but only when you buy smartly.

by James Wynbrandt

Preowned-aircraft shoppers typically seek a low-time, late-model airplane that’s equipped for the future—what Banyan Air Service senior vice president Mike O’Keeffe calls “a turnkey solution.” But shoppers with the time and experience—or the right guidance—can find great values among what brokers refer to as “project aircraft.”

“Any transaction that requires a significant work scope after closing—with a level of risk or complexity that would cause the average buyer to shy away from the deal—could be considered a project airplane,” says Vince Restivo at Mente Group, an aviation consulting firm.

As Restivo notes, most buyers avoid aircraft that need work. But “project airplanes that have a good pedigree should not scare anyone,” says Joe Carfagna, Jr., president of aircraft brokerage Leading Edge Aviation Solutions.

Ideal project aircraft have what experts call “good bones.” That means no corrosion or significant damage history and a good maintenance record. Still, some project candidates may not even be flyable, and “you have to negotiate an ‘as-is,

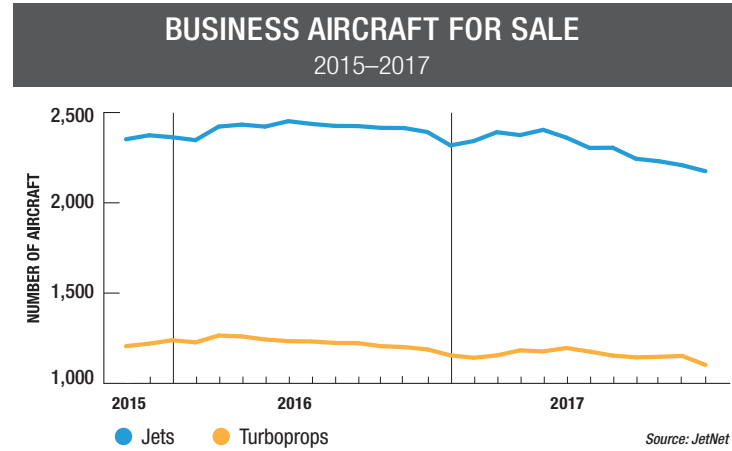
where-is’ deal, subject to borescope inspection of the engines and APU, logbook research, damage history, maintenance status, and all the ‘gotchas,’” says Brad Harris, president and CEO of Dallas Jet.

Project aircraft purchases may also be structured distinctly from “buy and fly” airplanes. “In a standard transaction, monies are deposited by the buyer into escrow and released upon closing,” says O’Keeffe. “Often, with a project aircraft, substantial sums are withheld in escrow after the closing and released to the vendors upon reaching contractual milestones.”

Besides refurbishment and maintenance, many project airplanes need upgrades to meet 2020 mandates like ADS-B-Out equipage requirements, but this shouldn’t deter bargain hunters.

Any major aircraft manufacturer or MRO facility can give you a quote, says Richard Hodkinson, at Clay Lacy Aviation. “They’ll ask questions to identify what status the airplane is in and tell you the options and cost,” notes Hodkinson.

Assessing a project’s potential cost is imperative. “From corrosion



to leaks to systems’ operational status, it’s easy to get ‘upside down’ quickly if surprises are discovered after the purchase,” says Rick Roseman, of RRAD Design. “The trick is to know, manage, and limit your exposure to these potentially expensive issues. Having technical advisory assistance is critical.”

It’s also critical to gauge the time the project will require. In today’s hot preowned market, MROs are busy, and this could extend project downtime. But that’s not necessarily bad, Hodkinson says. “It gives you time to prepare to put the airplane into service. There’s a lot to do between the time you buy the

airplane and the first flight: hiring pilots, maybe selecting a management company, getting letters of authorization for certain airspace you’re going to want to fly in. [Downtime] gives you breathing time so you’re really ready to go.”

When completed, a project airplane can give you an aircraft at a substantial discount to its value, outfitted exactly as desired, and rivaling any turnkey solution. Then again, one person’s turnkey is another’s project. Lee Thomas, a vice president at Eagle Aviation, points to a 2011 Falcon that the company recently brokered. “The paint and interior were good, but they just weren’t great, and it wasn’t the configuration [the buyer] wanted,” says Thomas. “He is going to spend probably \$3 million-plus on upgrades. If it wasn’t a project airplane before, it’s a project airplane now.”

SOME POPULAR PREOWNED MODELS

		CITATION C/J4	LEARJET 40	HAWKER 800XP	CHALLENGER 350	FALCON 900EX	GULFSTREAM G450
In-service		253	133	458	141	118	351
On the Market*	Number of aircraft	13	15	42	1	10	24
	Average days on market	262	263	337	233	265	326
	Average asking price	\$6.63M	\$2.25M	\$2.14M	\$15.7M	\$6.94M	\$14.64M
Sales in Past Six Months*	Number of aircraft	11	4	14	1	5	17
	Average days on market	243	255	242	384	269	222
	Average sale price	\$5.7M	\$1.77M	\$1.8M	\$16M	\$7M	\$14.6M

*as of December 13, 2017. Source: AircraftPost.com

James Wynbrandt (jwynbrandt@bjtonline.com), a multiengine instrument-rated pilot, is a longtime BJT contributor.

READY FOR TAKEOFF

This recurring editorial feature spotlights aircraft that are for sale at press time. For this issue, we asked dealers to submit the most attractive aircraft they're currently offering, regardless of category. BJT's editorial department selects aircraft for inclusion and the magazine receives no compensation in exchange for coverage. Brokers wishing to have their inventory considered for this department should email readyfortakeoff@bjtonline.com. —Ed.

Dealer's Choice



↑ Gulfstream G550

This 2013 aircraft features a forward galley layout with crew rest compartment and incorporates more than \$3 million worth of options, including Gulfstream Broadband Multi-Link, Honeywell High-Speed Data HD710, and Honeywell Satellite Television. It is enrolled in Rolls-Royce Corporate Care and the APU is on MSP Gold. Total flight time on the aircraft is just 1,675 hours.

Asking price: Make offer

Broker: The Jet Business



↑ Dassault Falcon 2000

This 1999 model, which is outfitted for 10 passengers, has 6,460 flight hours. Currently on a charter certificate on the West Coast, it features Airshow Genesys, Aircell satellite phone, Gogo Text & Talk, Wi-Fi with high-speed data, and four swivel monitors. The engines are enrolled in CSP Gold and the APU in MSP Gold.

Asking price: \$3.995 million

Broker: Guardian Jet

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King Air 350

A re-engine program for this venerable model produces dramatic performance improvements and lower operating costs.

by Mark Huber

Most airplanes eventually reach the stage when upgrading them no longer makes sense. The basic designs get too dated in the wake of more technologically advanced and economical replacement models. You'd be better off with Puerto Rican bonds than with blowing another dime on any sort of improvement on many aircraft. This is not the case, however, with Beechcraft King Air turboprops, a fact that prompted Texas-based Blackhawk Modifications to launch the XP67A upgrade package for the King Air 350.

You can trace the King Air's roots back to the 1930s, when Walter Beech introduced the Model 18, arguably the first cabin-class twin-engine business airplane. In 1958, Beech debuted the Queen Air, an aircraft that remarkably resembles today's King Air, save for the square passenger windows and piston engines. Beech delivered the first King Air in 1964 and by the late 1960s, the company commanded 77 percent of the business twin-turboprop market. Beech's efforts gave rise to an entire family of larger, more powerful business and commuter turboprops. Today, more than 7,000 King Airs are on the civil registry and more than 1,000 of those are big ones—the 15,000-pound Model 350 that debuted in 1990.

All King Airs are built like trucks, but among this durable lineage, the Model 350 stands out. The wing is certified for infinite life. The 350 was built to commuter-category standards, which provide for added levels of safety and redundancy on critical systems, including the electrical. If one of the two engines fails, its propeller automatically "feathers" to cut drag and the rudder is simultaneously boosted to compensate for the asymmetric thrust. The 58-foot-long wing handles turbulence and ice like a champ.

You can load up all eight passenger seats (typical cabin configuration) and full fuel and take off under most circumstances and land the aircraft at its maximum takeoff weight, a testament to the 350's robust landing gear. At normal temperatures and field elevations, you can operate safely from runways shorter than 4,000 feet, fully loaded. The range is excellent—1,806 nautical miles—and a stock 350 is no slouch in the speed department, either: it can cruise at 312 knots in the mid-20s and can fly as high as 35,000 feet. It handles so well that an autopilot failure is a non-event, and even relatively low-time pilots do not seem to have difficulty transitioning from piston aircraft into a King



Air. For missions up to 600 miles, the 350 gets you there within a couple of minutes of a jet for a whole lot less money. At 300 knots in the high-20s, it burns around 95 gallons of fuel per hour; reduce speed into the mid-200s and the burn rate drops to less than 60 gallons per hour.

As nice as all these features are, what continues to sell the 350 is its capacious cabin, which provides more shoulder room than the typical light jet, thanks to its "squared oval" design. The nearly 20-foot-long cabin is four and a half feet wide and nearly five feet tall—not exactly stand-up, but not Munchkinland, either. Fourteen large oval windows flood the cabin with natural light, and the ones on newer models are electrically dimmable. The propellers are farther forward and the engines are farther outboard than on smaller King Airs. That, combined with a tuning-fork anti-noise system, reduces the engine and propeller noise and vibration that make it into the cabin. You're not going to confuse flying in a 350 with flying in a jet, but it's not shake, rattle, and roll.

King Air 350 (original) Specifications & Performance

Passengers (executive)	8
Pilots	2
Range*	1,440 nm
Max Cruise Speed	320 ktas
Cabin Dimensions	Height: 4.8 ft
	Width: 4.5 ft
	Length: 19.2 ft

*Seats full, NBAA IFR 200 nm reserve fuel

Economics

Total variable flight cost/hour	\$1,320
Total fixed cost/year	\$343,549

Source: Conklin & DeDecker, Orleans, Mass.

Visit BJTonline.com for a searchable aircraft guide that contains detailed performance, specifications, and expense data for this and all other popular business aircraft.

A typical cabin layout features eight slide/swivel and recline executive seats arranged in a pair of club-four arrangements with worktables that deploy from the sidewalls. The sidewalls also host the passenger service units, cup holders, and power plugs. You can choose a six-seat configuration that features two forward-facing executive seats with footrests followed by a club-four. Aircraft entry is via an aft stair door. The aft cabin contains a lavatory with a solid fold-out privacy divider and a netted baggage hold with around 55 cubic feet of space. You can carry additional luggage externally, in lockers behind the engines. Altogether the 350 offers 1,150 pounds and 71 cubic feet of baggage capacity. The lav seat is certified for take-off and landing and you can install two more seats in the luggage area, bringing total passenger capacity up to 11. The 350 provides all the connectivity of a jet, with available Wi-Fi, Iridium satphone, and the Rockwell Collins Venue in-flight entertainment system.

No wonder then that the King Air 350 continues to be the line's bestseller in recent years, with 63 delivered in 2016 alone. Membership service Wheels Up has made it the backbone of its fleet, ordering 105 in 2013 and operating 78. Wheels Up CEO Kenny Dichter recently said that he sees the potential for as many as 1,000



King Air 350: original vs. Blackhawk upgrade

Model	First year produced	Variable cost/hour	Seats exec/max	Range (nm)	Normal cruise (kt)	Max takeoff weight (lb)
Original	1990	\$1,320	8/15	1,535	310	15,000
With engine upgrade	2018	\$1,252	8/15	1,788	332	15,000

Assumptions: Jet fuel \$4.30/gal; variable cost: fuel plus maintenance reserves; four passengers; NBAA IFR reserves (200 nm alternate). Max cabin altitude, 8,000 ft. Passenger weight, 200 lb each (includes baggage). Two pilots.

Sources: Conklin & de Decker Life Cycle Cost, Aircraft Performance Comparator.



BJT AIRCRAFT DIRECTORY

A data-packed, photo-rich guide to every major business jet, turboprop, and helicopter.


















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TYPE	CATEGORY	IN PRODUCTION	MANUFACTURER
All	All	All	All
MINIMUM PRICE	MAXIMUM PRICE	RANGE	SEATING
All	All	All	All


All aircraft data provided by Cirium & de Decker

MODEL	MANUFACTURER	CABIN SIZE	RANGE	PRICE NEW	PRICE USED	Options
 3000	Twin Commander	233 cu ft	1,210 nm	\$1.9M	\$262K - \$1.1M	LOG IN TO COMPARE
 206AL	Bell	208 cu ft	206 nm	\$960K	\$1.6M - \$2.0M	
 206B3	Bell	54 cu ft	270 nm	\$1.4M	\$322K - \$1.1M	
 206BR	Bell	54 cu ft	270 nm	\$1.5M	\$326K - \$1.1M	
 206L1	Bell	73 cu ft	240 nm	\$560K	\$460K	
 206L3	Bell	73 cu ft	210 nm	\$1.0M		
 206L4	Bell	73 cu ft	253 nm	\$2.3M		
 206L7	Bell	73 cu ft	106 nm			
 208 Caravan	Cessna	271 cu ft	315 nm			
 208 Caravan/Cargo Pod	Cessna	271 cu ft				
 208 Grand Caravan/Carg Pod	Cessna	352 cu ft				
 208 Grand Caravan	Cessna					
 208 Grand Caravan EX	Cessna					
 208 Grand Caravan EX/Carg Pod	Cessna					
 212						
 214E						
 214ST						


EMBRAER LEGACY 500




TYPE
JET



CABIN SIZE
823 CU FT



RANGE
3,193 NM




PRICE NEW
\$20M

EMBRAER LEGACY 500 RANGE

Embraer Legacy 500 has a range of 3,193 miles. Select a departure city from the list below to update the range map.

NEW YORK

Range is the maximum PFD range of the aircraft knowing of Avg Range Cruise speed with all passenger seats occupied.




EMBRAER LEGACY 500 SPECS


PRICING		PRODUCTION		FINANCIAL	
Price New	\$20M	Year Started	2014	Total Fixed Cost/Year	\$164,366
Price Used (Min)	\$18M	Year Ended	In Production	Total Fixed Cost/Hour	\$1,915
Price Used (Max)	\$19M			Total Fixed Cost/Unit Distance	\$4/rev
				Total Misc Cost/Hour	\$136,962
				Total Misc Cost/Year	\$544
				Total Crew Cost/Year	\$45,130
				Total Fuel Cost/Year	\$1,557
				Total Mo Cost/Year	\$870
				Total Variable Cost/Year	\$1,190,368
				Total Variable Cost/Hour	\$2,963
				Total Variable Cost/Unit Distance	\$6/rev

All aircraft data provided by Cirium & de Decker. Cost/Rev figures are based on 299 hours inquired per year; Cost/Unit Distance figures are based on 175,000 nautical miles traveled per year.


EMBRAER LEGACY 500 ARTICLES



EMBRAER DELIVERS FIRST FLORIDA-ASSEMBLED LEGACY 500



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of the aircraft in the company's fleet for North America and Western Europe.

A new 350 well-equipped sells for north of \$7.5 million and you can buy good used ones for about \$1.2 million to \$3 million (*see chart*). But what if you could get a 350 that performed *better* than new for less than the cost of a new one? Blackhawk Modifications' re-engine program purports to make that possible, and for 350s at or near engine-overhaul intervals, the proposition has appeal. Engine and propeller

overhauls for 350s can run around \$400,000 per side. The stock Pratt & Whitney Canada PT-60A engines have a recommended time between overhaul of 3,600 hours. For \$1.695 million (list price), Blackhawk's XP67A program provides a pair of more fuel-efficient and powerful, factory-new Pratt Dash 67 engines (1,200 shaft horsepower each); a pair of new five-blade composite MT propellers and spinners; all the software updates required to make the new engine/prop pairing compatible with either the stock Pro Line 21 avionics or an upgraded Garmin G1000 full glass-panel system; and required training.

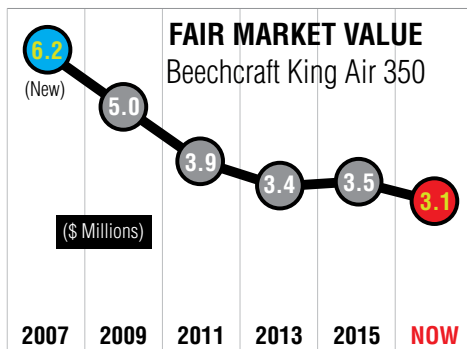
The performance improvements are fairly dramatic: a 25 to 30 percent power increase, up to a 40 knot boost in maximum cruise speed into the range of light jets, and a more than 50 percent reduction in climb time to cruise ceiling altitude. The shorter time to altitude, the less fuel you burn overall. The performance improvement is even greater in high/hot environments. (Think Aspen, Colorado in July.) Upgrading the stock Pro Line 21 avionics with the most current capabilities runs in the neighborhood of \$200,000 to \$250,000; advancing



to the Garmin G1000Nxi system with all the latest and greatest features will cost about \$350,000 to \$400,000.

Sinking that kind of money into an older airplane is not for everyone, but Blackhawk's research, combined with the pricing history of other King Air modification programs, indicates that owners will recapture their investment in lower operating costs and higher residual values. In the case of the King Air 350, making a good airplane better makes sense. **BJT**

Industry veteran Mark Huber (mhuber@bjtonline.com) has reviewed aircraft for **BJT** since 2005.



Source: Vref Publications



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Surf's Up



The Golden State offers ideal places to ride the waves, and two schools can teach you how to do it.

by Thomas R. Pero



Richard Schmidt calls it “surfology.” That’s his name for the ancient Polynesian sport of harnessing the energy of a wave and experiencing the exhilaration of sliding down its rushing face.

Schmidt, 57, has been doing just that out his front door in Santa Cruz, California, for nearly half a century. These days, he spends Februarys chasing waves in Costa Rica. When he returns home in March, it is with confidence that turbulent seasonal weather off the Pacific Ocean has rearranged inshore sandbars, creating the late winter and early spring surfing that he loves.



“The sandbars are set up pretty well because of the winter storms,” he says. “Waves break all day. When we have low tide in the middle of the day, we enjoy good water for three hours on either side.”

The waves Schmidt calls home are special. There are two dozen major surf breaks along the Santa Cruz coast, including famous reef and beach breaks such as Pleasure Point and Steamer Lane. Breaks are rated from expert to beginner, and surfers of all ages and experience levels can nearly always find attractive conditions somewhere.

Surrounding seaways are rich. Santa Cruz is a Marine Protected Area within the Monterey Bay National Marine Sanctuary. The beaches here are home to colonies of sea otters, sea lions, seals, and sea birds, all of which naturally attract great white sharks. Look out toward the horizon at the right time of year and, if you're lucky, you'll see pods of migrating gray whales.

According to California surfing legend, three


teenage Hawaiian princes took a break from their studies at a private school in San Mateo in 1885 and headed for Rivermouth Break, where they climbed aboard slabs of locally milled redwood and became North America's first surfers. The sport caught on, and by 1936 the Santa Cruz Surfing Club had formed.

To celebrate this exceptional culture and tradition, in 2011 an international organization called Save the Waves Coalition formally named the Santa Cruz region a World Surfing Reserve.

From Santa Cruz south to San Diego, some 450 miles, the spectacular California coast offers the finest surfing in North America. It's also the most accessible.

Looking down from Torrey Pines State Park to Black's Beach near La Jolla, you see what many seasoned surfers believe are the best waves hitting the mainland U.S. (You also see the state's most renowned nude beach, but that's another story.) The coastline's pounding breaks and ferocious currents are not for beginners. Nearby, however,

rocky outcrops create more hospitable breaks called Old Man's, at historic Tourmaline Surfing Park, where a plaque commemorates pioneering surfers and their encampments.

 Want to join the fun but don't know how to surf? Since 1978, Schmidt has been sharing his knowledge of and passion for the sport at Richard Schmidt Surf School in Capitola, near Santa Cruz, California. He has taught enthusiasts from all over the world.

Farther south, 39-year-old Souf Tihhi operates the San Diego Surf School, which he founded in 2000. Originally from a beach town in Morocco, Tihhi is a world-class surfing instructor. He is fond of reminding people that you can't stop the waves that life inevitably blasts you with, but you can learn to surf. **BJT**

Thomas R. Pero (tpero@bjtonline.com) is publisher of Wild River Press and the author of several books about fishing and hunting.

Surfin' Safari

In the 1959 film *Gidget*, Sandra Dee, playing 17-year-old Francie, talks her parents into buying her a used \$25 surfboard so she can chase an older beach-bum surfer named the Big Kahuna, played by Cliff Robertson. She wants to make a boy portrayed by James Darren jealous. The movie introduced West Coast surfing and the carefree if contrived swimsuit culture to American kids everywhere. They went wild.

A beach party scene filmed at Leo Carrillo State Park, off Pacific Coast Highway in Malibu, features the milquetoast Four Freshmen crooning off to the side. The music hadn't yet caught up with repressed teenage passion, but it soon would.

Two years later, a garage band named the Pendletones recorded two demo tunes called "Surfin'" and "Surfin' Safari" at a small studio in southern California. The record promoter saw an opportunity to cash in on the exploding youth market: fast cars, hot girls, and the surfing craze. The label on the 45-rpm vinyl disk by the Pendletones listed the group as the Beach Boys. Until they saw the record, they didn't know they had been given a new name.

Funny thing was, only one of them—drummer Dennis Wilson—actually surfed.

—T.R.P.



New York City
secrets

by Margie Goldsmith

If you live in or visit Manhattan, you undoubtedly know all of its iconic landmarks, from the Statue of Liberty to the Empire State Building to Central Park. But the city is home to many noteworthy places and activities that even longtime New Yorkers have yet to discover. Here are a few of our favorites.

Bring Out Your Inner Artist ¹

Those people copying paintings at the Metropolitan Museum of Art have joined the Drop-In Drawing at the Met program. Twice a month, adults and children of all ability levels can try their hand at sketching the work of a master artist in a class with instructors who gently guide the students. The program provides a folding stool, drawing board, pencils, erasers, and paper.

Info: metmuseum.org/events/programs

Blues on Bleecker

Big Ed's World-Famous Blues Jam, every Monday night, is cohosted by New York Blues Hall of Fame guitarist Big Ed Sullivan and Grammy-nominated songwriter Christine Santelli at the Red Lion on Bleecker Street in Greenwich Village. Four other famous bluesmen play in the hot house band, whose performance is followed by an open-mic jam by seasoned musicians, often playing on their night off from touring.

Info: redlionnyc.com

Shoot Out

Robert DeNiro in *Taxi Driver* practiced at the Westside Rifle and Pistol Range and so can you. The staff will provide a 22-caliber semiautomatic rifle, bullets,

targets, and safety gear, and you'll be shooting in two hours. The gun range is in the basement of an apartment building. Everyone from police to hobbyists, hunters, doctors, lawyers, and teachers comes to either let off steam or get instruction.

Info: westsidepistolrange.com

Bureaucrats in Bronze ²

Political cartoons inspired sculptor Tom Otterness's whimsical sculptures at the 14th Street and 8th Avenue subway stop. The installation, called *Life Underground*, includes one bronze figure that depicts a bureaucrat with a bag of money in place of his head; another shows a large suited man wrestling coins away from a tiny, simply dressed woman.

info: nycsubway.org



En garde! ³

Be in your own *Game of Thrones* by learning to use a sword at Sword Class NYC. This is the only school in the U.S. offering both Eastern and Western historical armed combat sword styles. Here, it's not just about the sword: it's about determination, strength, discipline, grace, and respect. Plus you'll learn to control your thoughts, your body, your energy, and your sword.

Info: swordclassnyc.com

Bind Your Own Book ⁴

If you love books, head for the Center for Book Arts, where experts teach everything from letterpress and woodcut to typesetting and leather



THE CENTER FOR BOOK ARTS

techniques. You'll be in the company of designers, visual artists, calligraphers, writers, and other book lovers.

Info: centerforbookarts.org

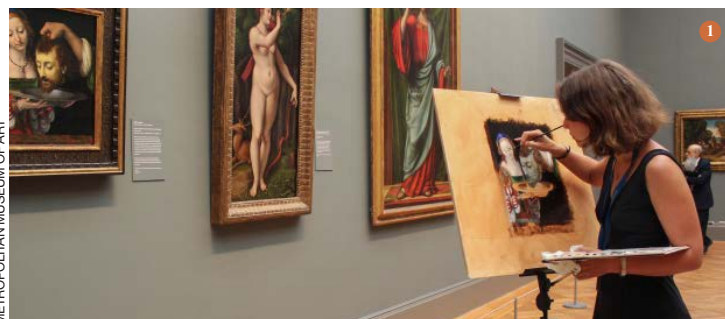
Saint Patrick's Cathedral Pig ⁵

More than five million people visit St. Patrick's annually, but how many of them know there's a demon stone pig climbing up the masonry of the Lady Chapel at the back end of the cathedral? It seems the architect of the Lady's Chapel lived in France for a few years and loved gargoyles, but the trustees made him create something more comical and less terrifying, so it's not a scary pig.

Info: saintpatrickscathedral.org



FOTOLIA



METROPOLITAN MUSEUM OF ART



SWORD CLASS NYC



New York City *secrets*

Sock It to Me

At the Sock Puppets Workshop, you'll design a zany puppet (yours to keep) with the help of an instructor. Start with a great-looking sock, add floppy arms of your choice, a silly tongue, crazy eyeballs, and whatever else suits your fancy. Kids aged 8 and up are welcome—as are adults who want to get in touch with their inner child.

Info: puppetkitchen.com

It's a Bird! It's a Plane!

The *Daily News* building, a National Historic Landmark, was the model for the fictional *Daily Planet's* headquarters, where Superman worked as Clark Kent. The lobby features a 4,000-pound revolving globe sunk into the floor as well as brass plaques showing the distance in miles from New York City to other places around the world.

Info: wikipedia.org/wiki/Daily_News_Building

Whisper Sweet Nothings

Many New Yorkers know about the Whispering Wall in Grand Central Terminal: whisper into one arched corner, and you're heard perfectly at the opposite corner. But few know that Central Park has its own secret



20-foot-long granite Whisper Bench at the top of the Shakespeare Garden (on the West Side, between 79th and 80th Streets). Whisper into one end, and your sweet nothings will travel to the other end.

Info: centralpark.com/guide/attractions/shakespeare-garden

Indulge at the Food Hall

Hungry? One of the city's best-kept secrets is the Plaza Hotel's Food Hall (enter at 1 East 50th Street and take the escalator down one flight). Here, you'll find an oasis of fine food purveyors offering everything from lobster, caviar, and sushi to sinful chocolate desserts and yummy frozen yogurt with counter-style seating throughout.

Info: theplazany.com/dining/the-plaza-food-hall/

Big Cheese

Sign up for a class on rare and unusual cheeses at famous Murray's Cheeses in Greenwich Village. You'll try a



half-dozen special wedges (with water and wine to wash them down) and learn about esoteric cheeses, such as Salers from central France, where dairy cows are milked only in the presence of their newborn calves.

Info: murrayscheese.com/classes

accompanied by mystical chants and solemn processions, the same setting for which the composer was writing his music. The free concerts happen every Sunday at 5 p.m., and all are welcome.

Info: holytrinitynyc.org

Back to Bach

For 50 years, Holy Trinity Lutheran Church on 65th Street at Central Park West has presented Johann Sebastian Bach's cantatas and motets during evening vespers. The music is

A Toast to Bemelmans

Ludwig Bemelmans, author and illustrator of the famous Madeline children's books, loved hotel life and traveling. He painted a huge mural in the bar at the Carlyle Hotel, depicting the four seasons of Central Park with animals instead of people. Even the lampshades have been painted with Bemelmans's designs. Instead of receiving money for his commission, the artist chose to live rent-free for 18 months at the Carlyle.

Info: rosewoodhotels.com/en/the-carlyle-new-york/dining/bemelmans-bar



SHUTTERSTOCK

Monday Night Magic ¹¹

You don't need to go to Vegas to see a great magic show. Every Monday night at the Player's Theatre in Greenwich Village, musicians invite a paying audience to a secret session. It's all word of mouth. Don't expect illusionists with red capes, real rabbits, or semi-naked assistants. This is New York's oldest running off-Broadway show and the magicians are side-splittingly funny and edgy.

Info: mondaynightmagic.com



Armchair Exploring ¹²

Not ready to climb Everest, paddle the Amazon, or head for Antarctica but curious about what these experiences are like? Stop by the Explorers Club, where non-members can enjoy lectures by astronauts, climatologists, and wilderness experts on some Monday nights. The wood-paneled building is filled with relics, such as the sleds Robert Peary dragged to the North Pole.

Info: explorers.org/events/



Just Add Popcorn

Love classic movies? On select Friday nights, the New-York Historical Society presents classic films preceded by an introduction by a movie critic, historian, or scholar. Coming this December: *A Man for All Seasons* (1966), introduced by U.S. Supreme Court Associate Justice Samuel Alito and scholar Philip C. Bobbitt.

Info: nyhistory.org/programs/upcoming-public-programs

Sit Where Kate Sat

Almost hidden inside Dag Hammarskjold Plaza, a small green space in midtown's Turtle Bay neighborhood, is a garden named after one of the area's most famous residents, the late actress Katharine Hepburn. The garden includes an old bench that the actress purportedly expropriated from Central Park and transported to her home in Connecticut. After Hepburn died, the estate donated it to the park.

Info: nycgovparks.org/parks/dag-hammarskjold-plaza

A longtime New Yorker and BJT contributor, **Margie Goldsmith** (mgoldsmith@bjtonline.com) wrote about her trip to Colombia for our October/November issue.

Beyond Manhattan

Have time to venture beyond Manhattan? Check out these noteworthy stops in New York City's other four boroughs:

The Early Bird Catches the Fish

Located since 1822 on South Street in lower Manhattan, the Fulton Fish Market moved in 2005 to a state-of-the-art, 400,000-square-foot facility in the Hunts Point section of the Bronx. The largest consortium of seafood wholesalers in the country, it is open from 1 a.m. to 7 a.m. Early birds will see top chefs choosing their catch of the day. Be sure to wear a jacket and hat because the market is as cold as a refrigerator.

Info: newfultonfishmarket.com



FOTOLIA

Think New York's Big? Not Here It Isn't

Head to the Queens Museum to see the 9,335-square-foot Panorama of the City of New York, a model of all five boroughs that was created for the 1964–65 World's Fair. The panorama includes miniature versions of 895,000 buildings, every street and park, and 100 bridges. Airplanes, each less than an inch long, take off and land from the model's LaGuardia Airport.

Info: queensmuseum.org

Grandma's in the Kitchen

Missing home-cooked food? Take the Staten Island Ferry to Enoteca Maria, a block from the ferry. Open Wednesdays through Sundays, this restaurant features food prepared by a rotating staff of grandmothers who cook their native cuisines from countries around the world, including Italy, Argentina, Algeria, Syria, the Dominican Republic, Poland, Liberia, and Nigeria. Enoteca Maria also offers free cooking classes.

Info: enotecamaria.com

Rich, Famous, and Infamous

Looking for history, tranquility, and memorable architecture? Visit Brooklyn's 400-acre Green-Wood Cemetery, a National Historic Landmark. Walk through the grand entrance, a marvel in itself, stroll past water bodies, up and down meandering paths and Revolutionary War sites, and visit mausoleums and graves of such luminaries as Basquiat, Tiffany, and Steinway as well as gangster Joey Gallo and the infamous Boss Tweed.

Info: green-wood.com



WIKIPEDIA/DAVID BERKOWITZ

SCOTLAND

Our correspondent saw bagpipers, castles, and gorgeous landscapes but, alas, no Loch Ness monster.

by Margie Goldsmith







MARGIE GOLDSMITH/OPENING SPREAD; FOTOLIA



MARGIE GOLDSMITH

When I'm in a new place, I like to rise early and explore while the city is still yawning itself awake, but it was late morning when my driver pulled into the entrance of the Sheraton Grand in Edinburgh, Scotland. I was jetlagged, and breakfast seemed like a better idea.

It was hard to choose between smoked salmon, eggs, cereals, pastries, bacon, and what I thought were two kinds of traditional breakfast sausages—until I read the descriptions. One turned out to be haggis pudding, which is made from a sheep's heart, liver, and lungs and is boiled in a sheep's stomach. It sounds disgusting, but it was delicious—similar to a spicy sausage. The other was black pudding, which is blood sausage made from pork fat and minced with oat groats. It was even worse than it sounds.

Americans typically visit Scotland to play golf, fish, or explore their ancestry. I came simply to tour Edinburgh as well as the unspoiled countryside up to the Outer Hebrides. After breakfast, I began by wandering over to the city's famous Royal Mile, which runs from Edinburgh Castle to Holyrood Palace.

On the Royal Mile, a bagpiper in traditional dress and a black bearskin cap entertained tourists who jockeyed for position to take selfies with him. A young man with a long sword dressed in a *Braveheart* horse's costume handed me a Norse helmet and demanded money for a photo. I donned the helmet, grabbed his sword before he realized what was happening, and pretended to fight him, cracking up as I handed him a coin.



ELLIOT GILLES

When I visited Edinburgh years ago, the *Britannia* had not yet been decommissioned, so that was my next stop. Behind glass were the adjoining bedrooms of Queen Elizabeth II and Prince Philip.

The Queen's Sitting Room was nearby, and I imagined her trying to sign documents with the ship rolling in a storm. Upstairs was her Rolls-Royce Phantom V, which could be squeezed into the ship's garage only by removing its bumpers and hoisting it onto a special track fitted on the deck. My first thought was that I'd never be able to park that car without scratching it.



ELLIOT GILLES

After viewing the *Britannia*, I left Edinburgh, heading up through the Highlands to the Tomatin Distillery, near Inverness, which is surrounded by velvety rolling hills and cascading streams. There, I looked up at an advertising poster that showed a long-horned Highland cow wearing a shaggy coat and red rubber Wellington boots. The ad read, “Tomatin Highland Single Malt Whiskey: The Softer Side of the Highlands.”

I joined a guided distillery tour that ended with a tasting of five whiskeys. The Tomatin guide poured the first into my glass and told me to smell it the way I would wine. Next, he said, take a sip and savor it for 10 seconds before swallowing. Normally, I don’t drink whiskey, but it felt smooth and velvety in my mouth. The guide then added an eyedropper of water, which he said would open up the flavor.

Maybe it opened a little too much flavor because back on the road, I was lightheaded enough to ask my driver if he wore anything under his kilt. He admitted that one night at a wedding he’d had a little too much to drink and fell over a table. “I wasn’t hurt,” he said, “but when I was upside down, everything was revealed, so ever since, I’ve worn dark underwear.”

Inverness is probably best known for Nessie, the monster that has supposedly been inhabiting the waters of nearby Loch Ness since at least 1933. Though no one has seen her, that doesn’t stop tourists from looking. My driver said that a boat captain had told two London teenagers that Nessie loves the English accent, so the boys spent the entire ride leaning way over the bow and talking in loud voices. They were really disappointed they didn’t find Nessie.

The morning after my distillery tour, I left my hotel shortly after dawn and ran through Inverness to a footpath along the River Ness where there were just a few other joggers. In front of me was a footbridge with a “Please Dismount Your Bicycle” sign. A cyclist arrived on the other side, dismounted, walked her bike across the short bridge, then remounted. If there were a dismount sign in New York City, no one would pay attention unless a cop was around. It was



ELLIOT GILLES

refreshing to visit a country where people actually obeyed rules.

A few times as we drove northwest in the Highlands towards the Outer Hebrides, we had to stop as herds of sheep crossed the road. We went down country lanes lined with fir and larch trees and passed fields dotted with gigantic rolls of hay. Always in the distance were the mountains. Each time we passed another ruin of a medieval church, I’d yell “stop!” and jump out to shoot a photo. The air smelled fresh, like earth and misty rain, even though it wasn’t raining.

In Lochinver, I gazed out of my hotel window at the boats in the harbor and watched the sky turn bright orange as the lights across the bay twinkled like Christmas bulbs. A little past dawn the next morning, I walked to the top of a steep hill and saw a similar mesmerizing harbor view. Coming back down, I stopped in my tracks. Less than 25 feet away was a large stag staring at me. I expected him to run away, but he didn’t. Slowly, I raised my camera and snapped. He turned, seemed to tiptoe across the road, and then broke into a short trot before climbing a nearby rock. There he stood, antlers pointed at the sky, as majestic as a *National Geographic* photo.

A ferryboat ride away to the Outer Hebrides was the Isle of Lewis. It was misty and the landscape was haunting



ELLIOT GILLES



ELLIOT GILLES

Traveler Fast Facts

WHAT IT IS:

Scotland, part of the United Kingdom, occupies the northern third of Great Britain, shares a border with England to the south, and is home to almost 800 small islands, including Shetland, Orkney, and the Hebrides. With a little less than 5.2 million people, Scotland has 550 golf courses, fishing in thousands of lakes, unspoiled countryside, secluded sandy beaches, castles, excellent fresh food, and some luxurious accommodations.

CLIMATE:

While you can visit Scotland anytime, late March to early October is best. June, July, and August might be less rainy than other months. (It rains all year, but not all day long and only in spurts.) Throughout much of the year, it’s a good idea to pack layers of clothing, a raincoat, gloves, and a cap, as the weather can change by the minute.

GETTING THERE:

Flights from European and American cities land in Scotland’s five international airports—Aberdeen, Edinburgh, Glasgow, Glasgow Prestwick, and Inverness—all of which can accommodate private jets. Air Canada Rouge, American, Delta, and United are among the airlines that fly direct to the country from North America.

WHAT TO KNOW BEFORE YOU GO:

Credit cards are widely accepted and there are numerous ATMs to exchange dollars for pounds.



Traveler Report Card

ACCOMMODATIONS:

The **Torridon** (A+) in northwest Scotland is set on 58 acres of parkland with 19 plush accommodations, an excellent restaurant, gin tastings, and guided outdoor activities. **Lewis Castle** (A) in Outer Hebrides has 23 luxurious guest rooms, which can be configured into full apartments with multiple bedrooms. Edinburgh's **Sheraton Grand Hotel and Spa** (A-), in the heart of the city, has 269 accommodations, a 62-foot rooftop pool, and a spa with endless water features, including an indoor-to-outdoor swim-in Jacuzzi. **Rocpool Reserve** (B) in Inverness has 11 rooms, but only one with a balcony and hot tub. You're there for the location and the Chez Roux restaurant (*see below*). **Inver Lodge** (B-) in Lochinver has 22 slightly shabby rooms saved by the location, harbor views, and Chez Roux restaurant.

CUISINE:

The food is especially delicious at Scotland's two **Chez Roux** restaurants: Rocpool Reserve (A+) and Inver Lodge (B+) as well as in the Outer Hebrides at **Talla na Mara** (A) which overlooks the beach on the Isle of Harris, Lewis Castle (A+), and the Torridon (A+). Stornoway's outstanding local favorite, **Digby Chick** (A+), chooses its delicious fish from whatever has been caught that day.

ACTIVITIES (A+):

August brings the famous month-long Edinburgh Festival. Other options include golf, fishing, deer stalking, archery, falconry, gorge scrambling, kite surfing, biking, hiking, kayaking, dolphin and whale watching, whiskey and gin tastings, and visiting castles. Alladale Wilderness Reserve in the Highlands is beautiful and has three caged wildcats. For shopping, the House of Bruar, less than two hours from Edinburgh, has everything, including the U.K.'s largest collection of cashmere.



ELLIOT GILLES



ELLIOT GILLES



FOTOLIA

The Isle of Lewis was misty, and the landscape was haunting and remote, with not a house or town in sight.

and remote, with not a house or town in sight. We drove past mountains of shale, green moorlands, and lakes with small, nearly treeless islands. My new lodging was a palatial suite at the recently restored Lewis Castle in Stornoway.

I love listening to choirs in foreign countries, and as the next morning was Sunday, I walked down the castle grounds and crossed the bridge into town. After wandering into and out of a church service where there was no choir, I suddenly heard music. I peeked through an open door and saw a drummer, guitarist, and tambourine player. Was it a rock band rehearsal? No, at least 12 people were singing a Christian rock hymn. A man signaled me to come in, and soon I was joyously clapping along with the parishioners, singing the words that appeared on a screen.

It could be said that the 5,000-year-old Standing Stones of Callanish, more ancient than the Pyramids and Stonehenge, also offer a spiritual experience. But were they placed there for religious reasons or do they have something to do with the sun and stars? No one knows.

The next day, we took the ferryboat back to the Highlands and drove up the driveway of the Torridon hotel, a former hunting lodge. In front of it was a pasture with three Highland cows and two calves, just like in the poster I'd seen, but with no Wellington boots. After lunch, I donned a pair of Wellies myself and joined a Torridon guide for a walk through the property's wooded trails, purposely sloshing through every bog I found. The mud barely covered my boot, but it made me feel like a kid.

And now it was time to go home. I thought about my wonderful week in which I'd traveled through miles and miles of pristine countryside, stayed in a castle, hiked through forests and bogs, observed Highland cows, seen a stag, visited the famous Standing Stones, and even managed to steal a sword from a *Braveheart* character. Maybe it was, as the Scots would say, a "wee" visit, but it was one I won't forget.

BJT

Margie Goldsmith (mgoldsmith@bjtonline.com), a longtime **BJT** contributor, wrote about Colombia for our October/November 2017 issue. For this article, Luxury Scotland, an organization of five-star hotels, provided air transportation, accommodations, activities, and meals. Little's Chauffeurs provided a car and driver.

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A blue Lexus LC 500 is parked on a paved overlook. The car is in the lower-left foreground, showing its rear and side profile. The license plate is yellow with black text, reading "R53 JEM" and "New Jersey Garden State". The background features a wide river winding through a valley, surrounded by lush green trees and rolling hills under a clear blue sky. A large tree with green leaves is on the left side of the frame.

LEXUS LC 500

It retains the magic of the concept car that spawned it, exuding glamor and making every drive an occasion.

Article and photos by Ian Whelan

Few autos make it from the concept stage to production with their original styling unscathed. After designers have a chance to bring their artistic vision to life and excite the press, automakers tend to build a more practical and less thrilling version of the car for sale, and some of the magic is lost.

That's not the case with Lexus's LC 500. This glamorously styled coupe appears nearly identical to the LF-LC concept that the automaker showed in

2012, which itself drew inspiration from the limited-production 2012 Lexus LFA. That V10 exotic came with the lofty price of \$375,000; but the LC, which retains some of the LFA's flavor, starts at just a fraction of that amount: \$92,000. What you get is an eminently more usable automobile—a luxury grand tourer with the soul of a muscle car. The LC's snarly naturally aspirated V8, rear-wheel drive, and innovative 10-speed automatic transmission add up to something special.

LEXUS LC 500



LEXUS LC 500 AT A GLANCE

Base price	\$92,000
Price as tested	\$100,989
Engine	Naturally aspirated 5.0L V8 gasoline engine
Power	471 hp, 398 lb-ft of torque
0–60 acceleration	4.4 seconds
Top speed	168 mph
Transmission	10-speed torque convertor automatic with paddle shifting
Curb weight	4,280 lb
Weight distribution	front: 54 rear: 46
Cargo capacity	5.4 cu ft
Fuel economy	19 mpg city/hwy
Warranty	4 years/ 50,000-mile basic, 6 years/70,000-mile powertrain

Source: Lexus

The mesh spindle grille and triple-projector LED headlights flow into a long, smooth, curvy body that feels as if it was borne out of nature and incorporates aluminum and carbon fiber panels for weight savings. The rear echoes the shapes up front and has super cool taillights that show off a three-dimensional infinity mirror effect that I've never seen on another car. The styling feels fresh and modern, and that also goes for the interior, which looks like concept-car fresh.

The all-aluminum, direct-injected and variable-valve-timing-equipped, 32-valve 5.0 liter V8 produces 471 hp at 7100 rpm and 398 lb-ft of torque at 4800 rpm. That's sufficient thrust to move this 4,280-pound beast to 60 mph in 4.4 seconds. That may not be supercar fast, but it's quick enough to thrill you. Put your foot down, and the active exhaust system opens, going from a soft burble to an all-out roar with crackles and pops on the upshifts. Since there are no turbochargers to spool up,

throttle response is instant, and there's a seductive sense of urgency tipping into the throttle at speed. Fuel economy is reasonable at 19 mpg city and highway combined, but Lexus also offers a hybrid version of the car, the LC 500h, that features a V6 and two electric motors and offers total output of 354 hp and 30 mpg combined.

Turning the scenery into a blur on long stretches of sweeping road is what the LC excels at most, but it's formidable and fun on tighter back roads. You'll notice the size



Turning the scenery into a blur on long stretches of sweeping road is what the LC excels at most, but it's formidable and fun on tighter back roads.

and weight, but precisely managing the car's balance with your right foot is easy. I wish there were a bit more feel to the steering, but it is sharp. It's light in Comfort and Normal modes, but it tightens in the two Sport modes, which also liven up the throttle response, suspension, and exhaust note.

The Michelin Pilot Super Sport tires on 21-inch forged wheels work with the adjustable, adaptive suspension to put a big contact patch on the road, providing a rock-solid feeling even on rougher surfaces while cornering. The ride always feels pleasant, even on the firmer suspension settings. On long curves at high speeds, the car grips marvelously and predictably, and when you're powering out of corners, an optional mechanical limited-slip differential helps put the power to the ground. The brakes are steel rather than carbon, but they are massive and have no trouble taking the heat in hard driving. There's nothing wrong with steel brakes if they're executed correctly, and on a car that will not likely see time on a racetrack, carbon brakes would be expensive jewelry. Lexus offers a performance package that includes active rear steering and a variable-ratio steering rack, among other enhancements.

The combination of the torquey engine and the torque converter 10-speed transmission allows for effortlessly smooth, nearly silent cruising at low rpm, and when you put your foot down, it keeps the engine in the strongest part of the rev range since it has so many ratios to work with. The gear changes during normal driving conditions are nearly imperceptible. Even when hustling the car, the shifts are smooth and fast. Magnesium paddle shifters on the steering wheel allow for quick manual gear selection, and it is nice to be able to shift between a couple of gears on a twisty road, enjoying the engine's torque curve while listening to its note change

through the revs. However, most often I let the automatic do its job, which it does well, allowing me to pay more attention to other aspects of the experience. It even downshifts with dramatic throttle blips while I'm braking in Sport mode. With an automatic this good, who needs a dual-clutch transmission?

The 2+2 interior is swathed in leather and Alcantara with aluminum accents. Details abound, but I



the seats comfortable for long trips, and they held me in place securely during high G maneuvers. The back seats are a bonus, but they're usable only if the front occupants are on the small side. Trunk space is reasonable, and you shouldn't have trouble fitting luggage for a weekend away.

Lexus has struck a decent balance between the number of dashboard buttons and functions that require you to navigate the



especially like the flowing Alcantara door panels, which blend with the dashboard. The glass roof doesn't open but is a welcome touch that contributes to the airy feel of the cabin. Our car featured a classic charcoal interior, but Lexus offers colors that show off the lines even more. The sport package's deeply bolstered Alcantara-covered eight-way sport seats are equipped with heating and cooling, but you can't adjust the bolsters and lumbar support is only two-way. Still, I found

Enform infotainment screen. Thankfully, you can make the essential stereo and climate-control settings through the beautifully crafted knobs and buttons. However, you primarily have to use a touchpad on the center console to interact with the main screen for the car's settings and the navigation system.

I understand why the designers chose this setup, as it allows the screen to be placed farther up and away on the dashboard, and

it eliminates nasty fingerprints. Unfortunately, it can be awkward to use. Even after learning the system, I found it difficult to utilize while in motion. Luckily, the Siri Eyes-Free voice recognition seems to work well, so you may opt to control the system that way. I am surprised that Lexus hasn't embraced Android Auto or Apple CarPlay, which are gaining in popularity. Enform has its own app suite, so it seems that Lexus is aiming to keep users in its own digital ecosystem. On the bright side, the optional 13-speaker Mark Levinson Reference sound system is an aural delight.

Advanced safety features are standard equipment. Dynamic radar-enhanced cruise control works at all speeds to keep a fixed distance from the car ahead and will even steer to keep the car in its lane. The pre-collision system automatically prepares the brakes for extra force and automatic application upon detection of an imminent impact through radar and a camera, and can detect pedestrians. A pop-up hood is designed to increase clearance between the hood and engine to soften the blow in case of a pedestrian impact. The convenience package's blind-spot monitoring will also warn of impending cross traffic while you're backing out of a parking spot.

The Lexus LC 500 is a great new offering in its category. It does everything you'd want a car like this to do: deliver superb comfort, power, and agility—and turn heads. It exudes glamor, and it makes driving an occasion. Open the door, slide in, press the start button, look out over the long hood, and listen to the thrum of that V8. It will be tough not to smile. **BJT**

Ian Whelan (iwhelan@bjtonline.com) is BJT's video producer and a longtime auto enthusiast.

Georgia's Champions Retreat

Play courses designed by three golf masters—and watch the Masters, too.

by Bradley S. Klein



Here's a private club with an unusual public twist. Almost all the time, Champions Retreat in Evans, Georgia, offers its elegant, country-estate amenities to members only. But for one celebrated week at the peak of each golf season (April 2–8 in 2018), when the Masters sets up its tent at nearby Augusta National Golf Club, Champions opens the doors to its 365-acre grounds and allows the public in, subject to limited availability.

Nowhere else can an ardent golfer find the combined design talents of the three Hall of

Fame major winners in tandem like this. The Jack Nicklaus–designed Bluff Nine is routed through mature pine forests and sits naturally on the native terrain. The Creek Nine, by Gary Player, meanders through low-lying wetlands. And the Arnold Palmer–designed Island Nine features six holes on German Island, a narrow swath between the Little River and the Savannah River.

It all makes for a gracious version of golf camp, thanks to a laid-back land plan that includes 16 guest cottages with four to eight bedrooms each. There's also low-country dining

and a 10,000-square-foot rustic barn that works for everything from buttoned-down corporate events to casual dances.

As a bonus, the facility offers concierge service, including transport to and from the Masters, 15 miles to the southeast. So not only can you play great golf courses; you can also watch golf greats.

BJT

Bradley S. Klein (bklein@bjtonline.com) is the architecture editor of *Golfweek*. His latest book is *Wide Open Fairways*.



GEORGIA

Atlanta

Augusta

SOUTH CAROLINA



Champions Retreat

Augusta

Aiken [South Carolina] Municipal Airport

Daniel Field

Augusta Regional Airport



COURSE:

For more information about the course, visit championsretreat.net or call (706) 854-6960.

AIRPORTS:

Daniel Field (DNL) is 17 miles southeast of the course and has a 4,000-foot runway. In Augusta, Georgia, Augusta Regional Airport (AGS) is 24 miles southeast of the course and has an 8,000-foot runway, while Aiken [South Carolina] Municipal Airport (AIK) is 35 miles east of the course and has a 5,500-foot runway.



PHOTOS: CHAMPIONS RETREAT

TRAVELER CALENDAR

February 6–9

SCHEDULERS & DISPATCHERS CONFERENCE

Long Beach, California. The National Business Aviation Association hosts the premier professional development event for anyone with responsibility for scheduling and/or dispatching business aircraft.

Info: nbaa.org

February 6–11

SINGAPORE AIRSHOW

Singapore. **BJT** sister publication *Singapore Airshow News* will report on Asia's largest aerospace event (ainonline.com/SingaporeAirshow18), which will feature all the latest technologies and equipment from top companies around the world.

Info: singaporeairshow.com



Windsor Charity Polo Cup

February 7

AMFAR GALA NEW YORK

New York. Since 1998, this black-tie gathering has been one of the city's most successful and high-profile AIDS benefit events. The gala consistently attracts some of the biggest names in entertainment, fashion, art, and AIDS advocacy; and it has allowed amfAR to invest more than \$450 million in programs that have produced advances in HIV prevention and treatment. **Info:** amfar.org

February 12–13

WESTMINSTER DOG SHOW

New York. The road to America's most prestigious dog event involves dedicated breeders, owners, and handlers devoting countless hours to training, grooming, and traveling as they work their way to the coveted Best in Show award.

Info: westminsterkennelclub.org

February 17

WINDSOR CHARITY POLO CUP

Vero Beach, Florida. Enjoy an elegant tented field-side champagne luncheon as you watch top-level international polo players compete for a good cause. Proceeds from this year's event will provide support to individuals and their families who are struggling with an Alzheimer's or

Parkinson's diagnosis and will help fund research to find a cure. **Info:** windsorcharitypolocup.com

February 18

DAYTONA 500

Daytona Beach, Florida. The heart-pounding "Great American Race" has sold out for two years, and this year's 60th running of the best of NASCAR will be no different. Grand marshal Dale Earnhardt, Jr. will give the "start your engines" command for the 500-mile/200-lap race. **Info:** daytonainternationalspeedway.com

February 26—March 1

HAI HELI-EXPO

Las Vegas. A host of operational, regulatory, and political issues will be discussed at the helicopter industry's largest gathering, which annually attracts 20,000 attendees from more than 90 countries. **BJT** sister publication *HAI Convention News* will provide coverage onsite and at ainonline.com/HeliExpo18. **Info:** heliexpo.rotor.org

February 27—March 6

PARIS FASHION WEEK

Paris. The biggest brands of prêt-à-porter fashion for the fall 2018/winter 2019 season will be on display. **Info:** fashionweekonline.com/paris

Dubai International Boat Show

The UAE boasts beautiful coastlines and top-notch marinas, so it's fitting that it will host a display of the world's most exquisite yacht collections from February 27 to March 3. The event will feature thrilling aquatic experiences, from kite surfing and kayaking to sailing and jet skiing, and you can find your perfect yacht at the new Dubai Canal, Jumeirah venue. **Info:** boatshowdubai.com —Lysbeth McAleer



South by Southwest

March 9–18

SOUTH BY SOUTHWEST

Austin. SXSW fosters innovation, creativity, and networking, and its app will customize your festival experience based on your preferences. Don't miss the incredible lineup of speakers, leading off with a keynote by Melinda Gates. **Info:** sxsw.com

March 9–July 23

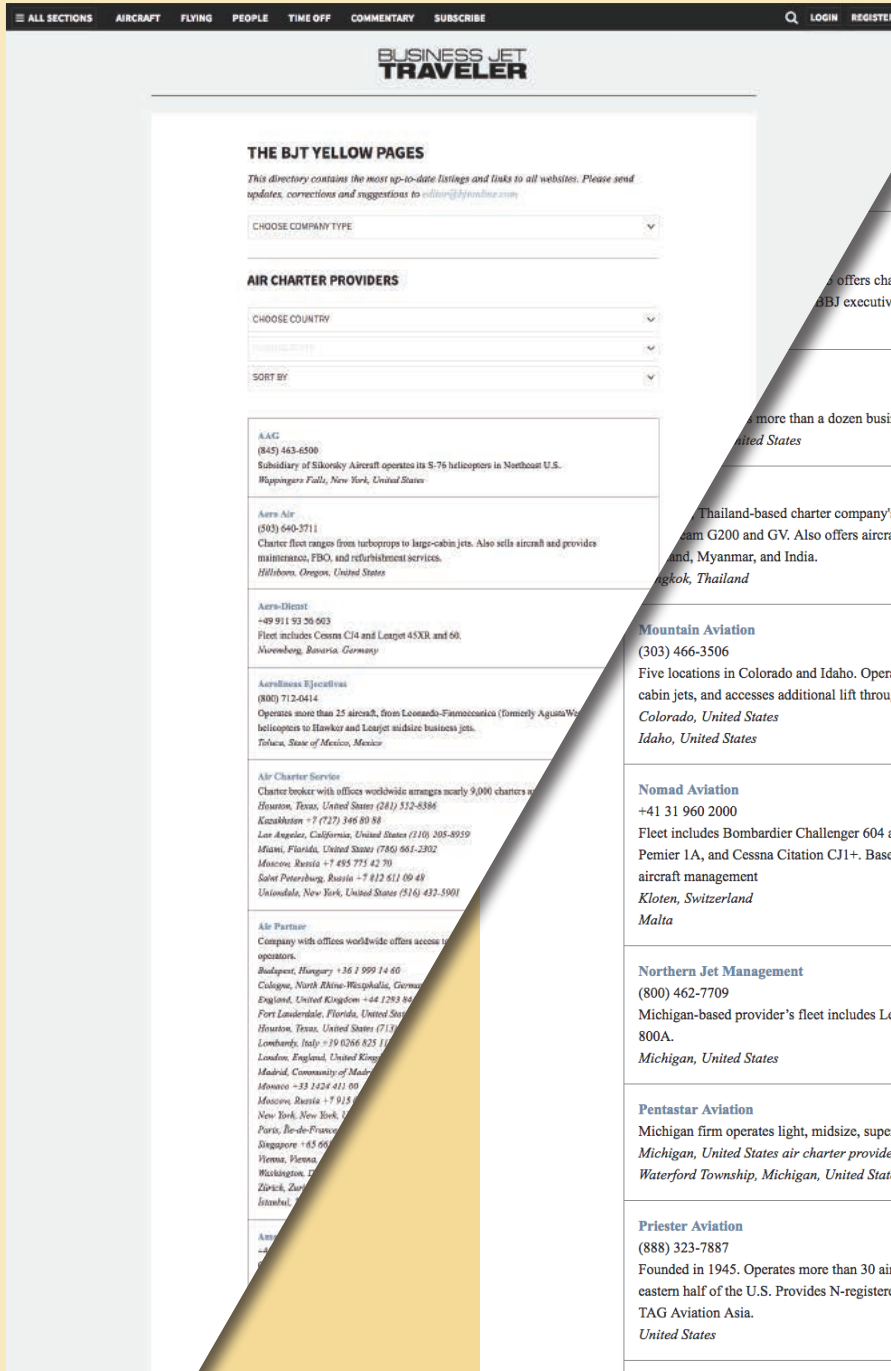
MARY CASSATT: AN AMERICAN IMPRESSIONIST IN PARIS

Paris. This retrospective, at the Musée Jacquemart-André, will have an exceptional selection of works by Mary Cassatt (1844–1926). Cassatt—who lived in France for more than 60 years—was discovered by Degas and had the distinction of being the only American painter in the Impressionist movement. **Info:** musee-jacquemart-andre.com

For a long-range events calendar, please visit bjtonline.com/calendar.

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Capturing flight data

Today's cockpit monitors collect vast amounts of information, making accident analysis easier while allowing for more efficient operations.

by Mark Phelps

It might not seem intuitive that a rugged utility airplane would need a sophisticated cockpit data recording system. The Cessna Caravan turboprop fulfills a lot of blue-collar roles, including carrying packages from remote regions to central hubs. Now available on the Caravan—as well as other aircraft, including business jets—the “Vision 1000” system from Appareo Systems “records inertial data, ambient and intercom audio, and high-resolution cockpit imagery,” providing “flight data analysis” for fleet operators’ Flight Operational Quality Assurance (FOQA) programs. Why would operators want to monitor every parameter of every minute of every flight of a Caravan or other plane? Partly, I’m sure, because they can.

In today’s data-centric culture, the more information that can be assembled, the better we feel we’re able to understand what’s going on—whether there’s a problem or not. Flying small cargo planes with solo pilots at night over inhospitable terrain is intuitively dangerous, so anything that can make it seem safer is worth the investment.

Beyond that, the data that FOQA collects helps streamline operations and can cut costs. For example, analysts can determine that average wind conditions on a particular route dictate that flying a few thousand feet higher or lower could save x amount of time and fuel. Multiplied over years, such a simple correction could save a lot of money and reduce the carbon footprint.

But back to safety: Do most operators suspect that their pilots are hotdogging and believe that the data recording system will snitch on them? No. However, one charter operation recently found through its data-collection system that its pilots were regularly exceeding normal bank and pitch angles on empty positioning flights. That

amounts to finding that limo drivers sometimes do donuts in snowy parking lots before leaving to pick up a passenger.

More practically, the detailed data collected over time by the cockpit monitors can show that the usual air traffic control arrival procedure at a particular airport might require a steep descent—or a tight turn—that needlessly increases risk. An operator can go to the FAA with a request for changing the arrival protocol, preventing an accident before it has a chance to happen.



JOHN T. LEWIS

Most people think of cockpit voice and data recorders as the “black boxes” that investigators analyze to determine what caused an airplane accident. Owner-operated light aircraft don’t carry black boxes, so investigators have always had to do a lot of guessing about what was going on in the moments before a fatal crash.

But today’s GPS navigators record flight data, such as speed, heading, altitude, and even

pitch and bank angles, and engine settings. So if the data card survives, then it will be a lot easier to zero in on what happened. It’s like a de facto “black box.”

While that is a positive development for overall safety, it has further ramifications. A few years ago, there was a fatal accident involving a high-performance kitplane. The GPS navigator’s data card showed that the airplane had been performing extreme maneuvers low to the ground. An accident that could have been blamed on the airplane was instead attributed not just to pilot error, but reckless flying. The same could be said for the recent accident that killed baseball pitcher Roy Halladay.

Moving forward, Automatic Dependent Surveillance–Broadcast (ADS–B) equipment will be required on virtually all aircraft by January 2020. ADS-B transmits much of the same information that’s found on the GPS navigators’ chips already, so the data will be recorded whether there’s a crash or not. This is being touted as one way to analyze all the flying in the country and refine air traffic routes, instrument approach procedures, and scores of other operational parameters. It promises great advances in improving efficiency, saving flight time, and conserving fuel—not to mention cutting back on greenhouse-gas emissions.

As for supplying incriminating evidence on pilots who break the rules, it remains to be seen how that might play out, but it could be problematic. Imagine, for example, if state troopers had real-time access to the Google maps or Waze data showing on your phone as you zipped past. **BJT**

Mark Phelps (mphelps@bjtonline.com) is the executive editor at AIN Publications, which publishes **BJT**.



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