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Bruce Dickinson, photographed for Business Jet Traveler by Carol Moir at England's Cardiff Airport.





# IS GOOD EVER GOOD ENOUGH?

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#### FEATURED CONTRIBUTOR

#### LIZ MOSCROP

Moscrop is a longtime journalist who writes exclusively about aviation. She has contributed to *Aviation International News, Fly Corporate, Flight Global*, the *Robb Report*, and the London-based *Times, Daily Telegraph*, and *Financial Times*. Her career highlights include interviewing Pink Floyd's Nick Mason and Prince Faisal of Jordan and—for **Business Jet Traveler**—John Travolta and Jackie Chan. Moscrop, who lives in England, authored a book called *The 100 Greatest Women in Aviation*. She holds a private pilots' license and is a passionate advocate for the business aviation industry.

Moscrop first met Bruce Dickinson, this issue's cover subject, through the charity Flying Scholarships for Disabled People. The day she talked with him for **BJT** was the day he first set eyes on his band's leased 747, and she says she felt rather cruel pulling him away from the cockpit to do the interview, as he was so thrilled with the new jet.



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# Up Front

#### Some well-deserved awards

hen my daughter recently asked me what I like best about my job, the answer came easily: it's the people. Every member of our team is creative, collaborative, and smart. Certainly, those adjectives all apply to columnists Jeff Wieand and Joe Sharkey, both of whom recently won prestigious awards for their work in these pages.

Since we began publishing in 2003, every issue of our magazine has included Jeff's meticulously crafted "Taxes, Laws, and Finance" column (*page 38*), which addresses complicated subjects in language a layman can understand. That column has now been recognized four times in the American Society of Business Publication Editors' annual Azbee competition, this year with a gold first place in the Northeast region and a bronze award nationally for best contributed column in any business magazine. As in 2011 and 2013, moreover, **BJT** has received honorable mention in Azbee's national Magazine of the Year category.

Joe Sharkey, meanwhile, has won a silver second-place Azbee for his column "On the Road" (page 12), which debuted here last summer after running in the New York Times for over 16 years. Sharkey was on assignment for us when the business jet he was flying on collided with an airliner in 2006, an experience he recounted in a front-page Times story and a feature in this magazine. These days, he can often be found in Kentucky, where his

Jennifer Leach English with Wilson Leach

1993 book, *Above Suspicion*, is being turned into a movie starring *Game of Thrones*' Emilia Clarke.

Pinally, I'm especially excited to report that my father, Wilson Leach, has received the Aerospace Media Awards' Lifetime Achievement Award. The award, which was presented at a banquet in London on July 10, recognizes his nearly half century of pioneering work in aviation journalism.

That work began in 1972, when the then 24-year-old New York University graduate teamed up with his friend Jim Holahan to launch the company now known as AIN Publications. That fall, they produced daily magazines for attendees at the annual convention of the National Business Aviation Association. Those magazines were the world's first high-quality, editorially respected aerospace-show dailies and, nearly half a century later, AIN continues to lead the field that it launched.

The company regularly sends large teams of employees around the globe to produce onsite daily magazines at aviation events in Switzerland, England, Dubai, Singapore, Paris, Brazil, and Shanghai. AIN has headquarters in Connecticut and New Jersey and offices in several U.S. cities as well as London and Paris. Besides publishing Business Jet Traveler, the company produces the monthly *Aviation International News*, which has long been the number-one magazine in its field worldwide.

Of course, I'm not impartial. But I am in the special position of having witnessed my father's hard work and dedication to AIN ever since I was a child, so I know how richly he deserves this award.

Jenn 1

Jennifer Leach English Editorial Director jenglish@bjtonline.com

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#### THE CONVENTION NEWS COMPANY, INC. - AIN PUBLICATIONS

Subscription inquiries and address changes: subscriptions@bjtonline.com



Business Jet Traveler (ISSN #1554-1339) is published eight times per year (bimonthly, plus U.S. and China Buyers' Guides) by The Convention News Co., Inc., 214 Franklin Ave., Midland Park, NJ 07432, (201) 444-5075. Copyright © 2016. All rights reserved. Reproduction in whole or in part without permission of The Convention News Co., Inc. is strictly prohibited. The Convention News Co., Inc. also publishes Aviation International News, AlNalerts, AlN Defense Perspective, AIN Air Transport Perspective, AINN Ly Business Let Traveler, BJMsyopionits, ABACE Convention News, Dubai Airshow News, EBACE Convention News, Farnborough Airshow News, HAI Convention News, DaBAC Convention News, MBAA Convention News, Paris Airshow News, Singapore Airshow News: Mobile Apps: Aviation International News; AlNonline, Postmaster: Send address changes to Business Jet Traveler, BJ Kenosia Ave., Danbury, CT 06810. Allow at least eight weeks for processing. Include old address as well as new, and an address label from a recent issue if possible, PUBLICATION MAIL AGREEMENT No. 40649046. RETURN UNDELVERABLE CANADIAN ADDRESSES TO PITNEY BOWES INTERNATIONAL MAIL, STATION A, P.O. BOX 54, WINDSOR, ON N9A 615, or e-mail: Futurnsille@inexpb.com.



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#### TAYLOR GUITARS

I would like to congratulate Mark Phelps on "Taylor Guitars' Bob Taylor and Kurt Listug" and "Tool or Toy" [April/May 2016]. I love the positive attitude towards corporate aviation—giving recognition to what a productivity enhancer business aircraft ownership is.

On many fronts, both private and corporate aviation affords immeasurable advantages. It is my hope there are more articles like these, offering up more truths about corporate aircraft use and debunking the stereotypes. Whether private or corporate ownership, it's a lifechanging experience!

> Jack D. Prewitt Jack Prewitt & Associates, Inc. Colleyville, Texas

#### RENTING OUT YOUR HOME

Nice write-up on how to turn a home into an income stream [Money Matters, April/ May 2016]. It is amazing how many of these concierge companies are popping up.

On the other end of the spectrum, online booking services make it easy for small property managers to start this kind of business, as they automate most of the marketing, lead management, and payment processing and even connect to home automation systems and accounting software. Just wanted to share an alternative to the costly concierge option.

> Melissa Kling posted on bjtonline.com

#### EIGHT MILES HIGH

I enjoyed Mark Phelps's Exit column ["How High Did the Birds Fly?"] in the October/ November 2015 issue. We flew with John Lear from Van Nuys [California] to Pensacola, Florida, and back for a gig in 1966. John did a split "S"

Your comments are welcome. Please e-mail letters to editor@bjtonline.com. Include your name, address, and a daytime telephone number. Letters are subject to editing and are presumed to be for publication unless the writer specifies otherwise.



on the Pensacola approach. Peter Fonda was on the plane with us and wrote about the trip in the liner notes for the Ballad of Easy Rider album.

> Roger McGuinn via email

Phelps's Exit column concerned the Byrds song "Eight Miles High," which McGuinn, the group's leader, cowrote. -Ed.

#### FLIGHT ATTENDANTS

Regarding PrivateSky Aviation chairman Vincent Wolanin's comments in "Singing the Flight-Attendant Blues" [April/May 2016]: What baloney! Can Mr. Wolanin find his own way out of a smoke-filled cabin, give himself CPR, and attach his own electrode pads if, God forbid, he suffers a heart attack?

His pilots are responsible for the aircraft's safe, efficient operation, but how much time do they have to vet catering? Food poisoning is a common reason for medical diversion of a flight. Miracle on the Hudson and Air France in Toronto are just two landing accidents that come to mind where flight attendants likely made the difference in passengers' survivability.

Yes, service can be important, but safety should be the overriding reason for flight attendants being onboard corporate aircraft.

> Steve Thorpe posted on bjtonline.com

#### **GIV CRASH**

John Goglia's "Learning from a Preventable Accident" [April/May 2016] leaves readers wondering what the pilots missed by failing to use a checklist. I know from other sources that they failed to disengage the gust lock, which in turn prevented flight-control surfaces, such as the elevator, from operating properly.

Also, Goglia fails to mention the NTSB's conclusion that the pilots didn't use checklists on almost all of their last 175 flights. Perhaps the checklists were computer-generated, requiring pilot input that could later be verified? This is relevant because the author goes on to advocate having cameras in the cockpit to monitor pilot conformance with required procedures. If the NTSB was able to verify that the pilots didn't use checklists on previous flights, couldn't the airplane's owner have used the same information to monitor the pilots? If so, why didn't they? Safeguards like cameras work only if someone is reviewing the footage.

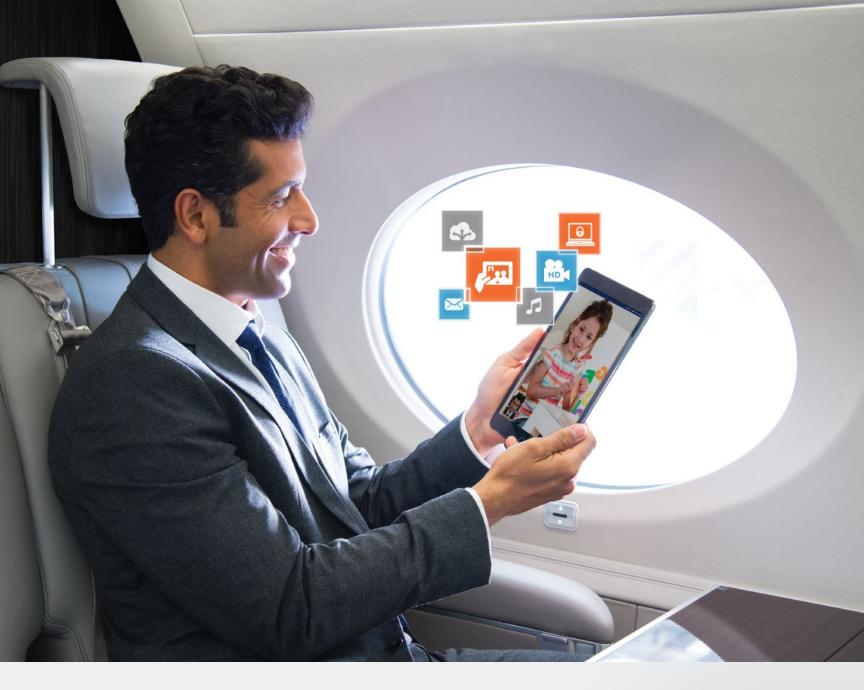
> R.B.posted on bjtonline.com

Goglia replies: The NTSB reviewed the flight-data recorder and determined that the flight controls for numerous earlier flights weren't moved prior to takeoff as the checklist required. According to the NTSB report, the Quick Access Recorder (used to retrieve information from the flightdata recorder) "contained 176 takeoff events, including the accident takeoff. A control check was defined as stop-to-stop motion of the elevator, ailerons, and rudder at some point between the beginning of the FDR power cycle and takeoff. Out of the 176 takeoff events, two complete and 16 partial control checks were identified...Each takeoff event was also reviewed to note the airspeed at the time the elevator began to move during the takeoff roll. In each case, except for the accident takeoff, the elevator began to move at approximately 60-80 knots calibrated airspeed."

CLARIFICATION AND CORRECTIONS: As the cover story in our last issue noted, Tony Robbins's Basket Brigade program provides food for two million people annually. His reference elsewhere in the article to feeding 100 million reflects the fact that—thanks partly to matching funds—he also provides meals for about that many people each year through his partnership with Feeding America.

The photo credit with the same story included an incorrect acknowledgement; we intended to thank Seth Mager and the wonderful team at Atlantic Aviation at Florida's Palm Beach International Airport. Also, we misplaced quote marks in Robbins's wife's name, which is Bonnie Pearl "Sage" Robbins.

In the Book of Lists in the same issue, we incorrectly stated the location of the S.S. Jeremiah O'Brien, which is in San Francisco.



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# A BOURBON BLAST

Visiting Louisville? Make time for a stop at the Kentucky Bourbon Trail.

Created in 1999 by the Kentucky Distiller's Association, the KBT guides you to nine distilleries that offer visitor centers, tours, and tastings. You can learn about bourbon history (dating back to the late 1700s), Congressional

rules for calling a whiskey "bourbon," and variations in the distilling process that create distinct flavors.

Start at the Evan Williams Bourbon Experience on Louisville's Whiskey Row, where you'll enjoy a guided tour through museum-quality exhibits

before tasting several well-aged bourbons. Nearby is Jim Beam's Urban Stillhouse, where you can label a bottle and fill it with bourbon that was produced onsite. Five miles from downtown Louisville, Bulleit Frontier Whiskey Experience offers tours of its Stitzel-Weller distillery, which dates back to 1935.

The rest of the distilleries on the Bourbon Trail are scattered through the rolling hills of central Kentucky. While they're all within 90 miles of Louisville, the road system and limited visitor hours preclude seeing every one of them in one day. However, limo services offer four-hour and full-day tours focused on a single area.

For example, in one day, you can tour the historic Woodford Reserve distillery, explore the glass and wood-plank visitor center at Wild Turkey, sample bourbon at Four Roses, and sneak a peek at Town Branch's ultramodern glass-walled distillery. Another day, you

can tour the Bardstown region, stopping in at Maker's Mark, Jim Beam's American Stillhouse, and Heaven Hill's Bourbon Heritage Center. Then top off your trip with an \$80 shot of Pappy Van Winkle at KBT-sponsor Old Talbott Tavern.

For more information, call (502) 379-6109 or visit kybourbontrail.com. —Kim Rosenlof





#### **COMPÈRE LAPIN**

535 Tchoupitoulas St., New Orleans (504) 599-2119 • comperelapin.com



If you've never previously been to New Orleans or a few years have passed since your last visit, you'll surely head first for a culinary classic like Commander's Palace or Antoine's. But on night two or three, you'll do well to try a fast-rising newcomer called Compère Lapin.

Featuring a Caribbean-influenced menu, this hip, brick-walled restaurant occupies a 19th century coffee warehouse four blocks from the French Quarter in the bustling Arts District. Chef Nina Compton—a New Orleans "Top Chef" runner-up in the 2013–14 season—pays homage to her St. Lucia upbringing with such dishes as a delightful small plate of conch croquettes, a neat stack of lightly fried logs with pickled-pineapple tartar sauce, and a curried goat second course accompanied with ethereal sweet potato gnocchi.

Named for a Brer Rabbit—like the prankster rabbit in Southern tales, the restaurant is slyly playful—from the pink bunny silhouette stenciled in bitters atop the foam of the well-made pisco sour to such nods to local and other cuisines as an offering of crispy dirty rice arancini with a sour orange mojo. Even the tiny bottle of house-made hot sauce is part of the performance. The top unscrews to reveal an eyedropper. —John Grossmann



#### A Treasure Trove of African American History

On September 24, President Obama will be on hand for the opening of the Smithsonian's National Museum of African American History and Culture, a 400,000-square-foot building on the National Mall in Washington, D.C. The nine levels (including four below ground) contain exhibition galleries, an education center, a theatre, a café, a reflecting pool, and a light-filled memorial area for quiet reflection. The museum focuses on how the African American experience helped shape the country, and how the struggle of African Americans has impacted fights for freedom around the world. The more than 34,000 artifacts include a slave cabin, Rosa Parks's dress, Chuck Berry's Cadillac, and Nat Turner's Bible. Says

the museum's founding director, Lonnie Bunch, "This is a place that transcends the boundaries of race and culture that divide us and becomes a lens into a story that unites us all." For more information visit nmaahc.si.edu.

—Margie Goldsmith



#### **Time Is Precious** and So Are These Timepieces

Richard Mille

RM 50-02 ACJ

Tourbillon

Split Seconds

Chronograph

The new TAG Heuer Carrera Heuer-02T tourbillon wristwatch is drawing stares as much for its price—a relative bargain at \$15,950—as for the masterpiece of engineering visible behind its face.

The tourbillon, patented in 1801 by Abraham-Louis Breguet, is a gimbaled, rotating cage that holds the watch's escapement and balance wheel and compensates for the effects of gravity on a watch's movement. The precise compensatory effect may be only theoretical, but if accuracy is your main aim, you'd be better off with an iPhone, which will cost a whole lot less and keep even better time.

What horologists have long celebrated is the engineering and manufacturing achievement the tourbillon represents. Only a few hundred tourbillons—initially designed for pocket watches—are thought to have been produced before the late 1990s. But given its reception, the Carrera Heuer-02T, with a tourbillon case of grade-five titanium, may significantly expand the market for these pace-setting products.

TAG Heuer calls it "affordable haute horlogerie." Admittedly, the same could have been said of the previously least-expensive tourbillon wristwatch, Montblanc's 4810 ExoTourbillon Slim, at \$34,500. In contrast, a top-end Greubel-Forsey Quadruple Tourbillon sells for \$815,000, though with four of the mechanisms for enhanced gravity-defying accuracy, you're paying only about \$204,000 per tourbillon.

> But time isn't ticking down on stratospheric tourbillons. Watchmaker Rich-

RM 50-02 ACJ Tourbillon Split Seconds Chronograph, which was developed in association with Airbus Corporate Jets (hence the ACJ in its appellation). Created to reflect the spirit of modern aircraft design, the RM 50-02's tourbillon's bridges and baseplate are grade-five titanium, the alloy used in the Carrera Heuer-and in the turbine blades of engines on ACJs. Parts within the movement have also been treated with an anticorrosive "special aeronautical coating."

ard Mille has just released his

The timepiece has functions more common to jets than wristwatches, including a torque indicator (providing data on the tension of the mainspring) and a powerreserve indicator. The RM 50-02 ACJ will

appeal to purists who pine for the days when the tourbillon was a true rarity, as just 30 are available, priced at \$1.3 million each. —James Wynbrandt



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.

#### The Sunshine **Kids Foundation**

(sunshinekids.org)



The Sunshine Kids Foundation aims to improve the quality of life for children living with cancer by providing group activities that promote self-esteem, personal accomplishment, and-perhaps most important—fun. Since the charity's inception in 1982, thousands of children in hospitals across the U.S. have benefited from its free programs. The foundation tailors activities to the needs of patients in all stages of care. For example, it provides arts and crafts and circus parties inside the hospital for children facing long stays; and it offers a full schedule of regional and national events that include movie premieres, pirate cruises, and weeklong trips to places like Disney World and Hawaii.

Sunshine Kids' hope is that eradication of childhood cancer will someday make its work obsolete. But until then, it is committed to helping children with cancer "do what kids are supposed to do...have fun and celebrate life."

-Jennifer Leach English

### QUOTE **UN**QUOTE

"I guess an airplane is pretty decadent, right? But if anyone has a problem with that, tell them to go f--k themselves, because I will live in that trailer [I own] in Alabama before I give up that f--kin' airplane. That airplane is, hands down, the greatest luxury a human being could have. There's nothing that f--king beats it. F--k a yacht."

> -musician Kid Rock, when asked to name his most decadent purchase SOURCE: ROLLING STONE



# The View from On High

Business jets typically have good-looking cabins, but the most memorable sights are often through the window.

by Joe Sharkey

he views from a private jet can make for a sublime experience. You really do get the feeling of having "joined the tumbling mirth of sun-split clouds" and "chased the shouting wind," to quote Royal Canadian Air Force pilot John Gillespie Magee Jr.'s stirring 1941 sonnet, "High Flight."

Here's an example. I recently flew in a business jet from the Midwest to Las Vegas, and as I looked out the window well into the flight, we'd just crossed the hump of the western Rockies. Somewhere below, I guessed, were the headwaters of the Colorado River, where it gathers shape and starts tumbling on a 1,450-mile course through Colorado, Utah, and Arizona, into Mexico, and finally toward the Gulf of California.

Living in the Sonoran Desert just outside Tucson, Arizona, I have a more-than-casual interest in this river, without whose bounty much of the southwestern U.S. would have a hard time thriving. So after looking out the window for a few minutes, I walked up to the open cockpit door and leaned in with a question: "Doesn't the Colorado River start in the mountains somewhere down there?"

The first officer surveyed the craggy landscape 35,000 feet below. "You know, I think it does," he said finally.

Now the captain also was curious. "Get the map," he said.

The first officer pulled one out. And sure enough, right down there we could discern the Colorado headwaters. For the next long phase of the flight, we followed the route of the river as it gained force down the mountains and plunged southwestward, turning emerald-hued as it cut through the Grand Canyon that it had created, backing up in Lake Mead behind the Hoover Dam. For pilots and passengers alike (several others in the cabin had joined the fun of following the Colorado from their seats), it was an unanticipated lesson in geography, history, and simple beauty.

That sort of thing—being able to luxuriate on the magnificence of the Earth from the air—still thrills my friend Adam Twidell, a former Royal Air Force pilot who entered business aviation through NetJets and now is the CEO of PrivateFly, a London-based private jet charter network.

"You're a lot closer to the very idea of aviation" in a business jet, he said recently, after mentioning that he'd loved air travel ever since he was a kid listening to radio transmissions from pilots on approach to an airport near his home in Scotland.

In military aviation, of course, the thrill of flying can be most dramatic. I recall being aboard a small Navy transport that landed on a giant aircraft carrier in the South China Sea off Vietnam in 1968. That carrier looked like a floating cigar from 30,000 feet over the vast cobalt sea, until it suddenly heaved up sea monster–like as the descending airplane framed that flight deck and belly-whumped in. What a kick that was!

On a business jet, the thrill is subtler, but often indelibly memorable. One reason is that, as Twidell put it, "your airplane to a certain extent goes where you want it to. You need to plan, of course, but you can deviate somewhat, and if you want, you can follow the lay of the land."

He added that he relishes contemplating the hills of his native Scotland and the landscapes of Wales from the air. Twidell once flew a cycling champion on a private jet and traced the man's training route on the Pyrenees on down to the Mediterranean. He recalls the perimeter between India and Pakistan, lit up so brightly at night by opposite-facing military garrisons that it was as if the entire border were a distinct line burned into the Earth in a wall of fire.

"On an airliner," said Twidell, "you see things like that just fleetingly as a passenger. "For the [airline] pilot, somebody else has come up with a schedule months in advance; your passengers are packed in side by side; and your whole route is outlined for you. You can deviate from that a little for weather, when you tell the air-traffic controller you'd like to go left 20 degrees for one mile. All the way, though, you're very much asking for permission."

# "If you want, you can follow the lay of the land."

On a business jet, he added, "the passengers often will come up to ask if they can fly over a certain area. And in general, you get lots of questions from passengers about flying, or about cities or places that you see below. You have the joy of engaging in conversation about flying."

What I usually remember most is the final approach. Earlier this year, Twidell's PrivateFly invited me to participate on a panel of travel writers and aviation enthusiasts in the company's global poll to choose the world's most striking approaches by air.

The list I submitted had two places that I most remember seeing from a passenger window of a private airplane.

Juancho E. Yrausquin Airport on the tiny island of Saba "looms out of the Caribbean like Kong Island in the first (1933) King Kong movie," I wrote. "The landing between jagged cliffs onto the world's smallest commercial airport runway (1,300 feet) is as memorable as landing on an aircraft carrier."

I also named Malta, of which I wrote: "Approached from a churning blue sea, the tiny, isolated rocky island nation suddenly appears. You immediately understand Malta's strategic geo-political importance for literally millennia by sea and later air in the middle of the Mediterranean."

I was happy to see that PrivateSky's final Top 10 list of approaches, compiled with 7,500 individual votes, had Saba at No. 5, but I was especially pleased to see that Malta was No. 1.

Like me, Twidell has flown into ancient Malta on a private jet. Approaching it, he told me, "is like flying into a painting."

I don't think the poet John Gillespie Magee
Jr. could have said that better.

**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.

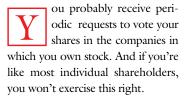


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# Voting your shares

Most individual investors don't participate in stockholder elections. Here's why you should.

by Chana R. Schoenberger



Retail investors hold one-third of publicly traded shares in U.S. companies. They vote those shares only about 30 percent of the time, says Chuck Callan, a senior vice president at Broadridge, which oversees proxy votes for companies. And when they do vote, they typically follow management's suggestions, endorsing its handpicked slate of directors and backing the company's view regarding any

corporate-governance proposals on the ballot.

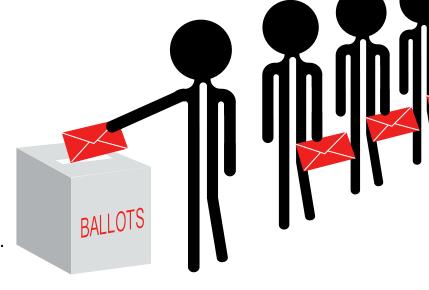
That may be partly because individual shareholders who don't agree with management's initiatives will almost always sell the stock rather than hang around to vote, Callan says. It may also be because many stockholders don't know much about the candidates and issues and don't take the time to find out more.

High-net-worth clients tend to hold shares within exchange-traded funds, mutual funds, or advisormanaged accounts. They rely on the managers of those funds and accounts to vote on their behalf and rarely vote their shares on their own, says Adam Katz, a private wealth advisor with Merrill Lynch's Bodner Sax Group in New York. One exception: when clients own stock through a family foundation, they may want to vote their proxies if the issues on the ballot relate to the philanthropic purpose of the foundation or a cause about which they care deeply, Katz notes.

ou may think you hold too small a stake in a company for your votes to matter. But corporategovernance experts say minority shareholders can have an impact. Companies do care what consumers who buy their goods think of their reputation, says Elise Walton, a governance consultant in New York City. That's why retail shareholders' votes matter, to some extent: because those shareholders could also be the company's customers.

"I do think the watchdog aspect keeps management attentive to what's being said about them in the marketplace," Walton comments.

Also, boards look at the aggregate voting tally to see what issues matter to the stockholders, says Eleanor Bloxham, CEO of the Value Alliance and Corporate Governance Alliance, a consulting firm in Columbus, Ohio. Institutional shareholders voting the way you do will be able to aggregate



#### If Individual Investors Don't Vote, Who Does?

Institutions like pension funds, mutual funds, and hedge funds cast the vast majority of votes in shareholder elections. Fund bylaws often require them to vote in corporate elections, because of the fiduciary duty that they have to their shareholders. When funds track benchmarks or have a particular investment focus, also, they often are obligated to hold specific shares and can't vote with their feet by selling stock instead. That's why more than 90 percent of shares belonging to funds get voted, says Chuck Callan, of Broadridge, which manages proxy votes for companies.

Institutions usually vote following the guidance of proxy advisory firms like Glass Lewis or Institutional Shareholder Services. Those firms, which don't serve individual investors, also provide a "vote agency" service in which they handle voting for institutional clients.

"This enables subscribers to the research [reports] to automatically cast votes consistent with [their] recommendations if that's what the subscribers wish to do," Callan says. Companies buy this service because they don't want to devote their own resources to researching and analyzing the proposals for all the shares they own, he notes.

The advisory firms typically insist that companies garner a large percentage of the vote, not just a simple majority, as a measure of shareholder support. In some cases, Callan says, proxy advisors may require that companies get 70 or 75 percent of voted shares in favor of proposals before they adopt them.

"If they fall below that threshold, that may trigger an against-vote recommendation by that proxy advisor in the subsequent year" for that specific director or issue, Callan says. That's why you may get a call from a company whose shares you own, asking whether you would like to vote over the phone. —*C.R.S.* 

your vote when they advocate for

your vote when they advocate for their point of view with management. "If you don't vote, the company will tend to say, 'We didn't get that kind of message from the shareholders,'" Bloxham remarks.

Your proxy vote offers a way to take a stand on issues important to the company or to society, she adds. If you follow news about companies whose shares you hold, you'll know what problems they're facing. Questions that appear on the proxy tend to represent matters on which institutional shareholders weren't able to get the board to act, Bloxham notes.

As an individual shareholder, you have the opportunity to vote on some of the major issues roiling corporate life. Recent proxy questions have involved pay equity for women, natural-gas fracking, and the ability of ordinary shareholders to nominate corporate directors. This question of proxy access is expected to make it easier and less expensive to hold contested board elections.

"What that does is enable share-holders to nominate directors if those shareholders meet certain criteria, like owning shares continuously for three years, for instance," Callan says. If those conditions are met, director candidates must be put on the main ballot, and the shareholder doesn't have to hire lawyers to wage a pricey proxy contest. The New York City comptroller's office, which oversees the city's powerful pension funds, is

behind the proxy-access idea, as are other pension funds, Callan adds.

Because corporations play a large role in society, affecting everything from politics to lobbying, the environment, and the labor market, shareholders should take their vote seriously, Bloxham says. "It's as vital, if not more vital, to exercise the shareholder vote as it is to vote in the presidential elections."

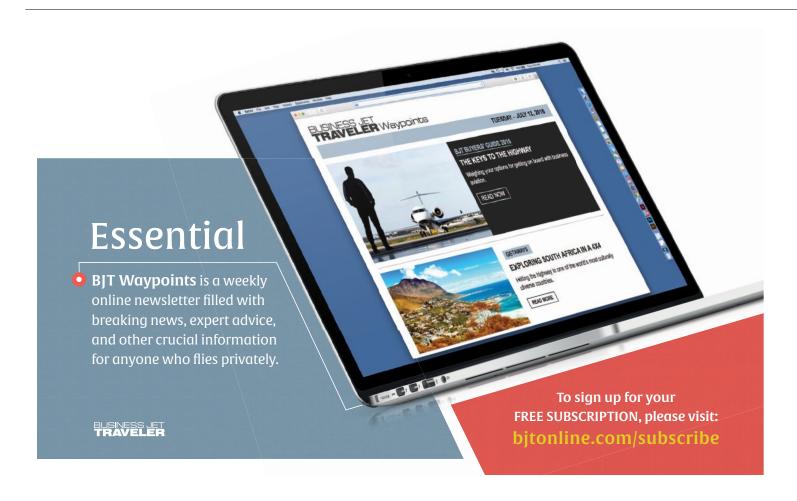
Bloxham suggests starting with the SEC's webpage, sec.gov, where each public company is required to file its financial statements and proxies. Search by corporate ticker to see a company's filings.

As for voting for board members, you can't simply study their positions on issues. Directors don't necessarily

take stands, the way political candidates would. So you need to look at their profiles, experience, other board memberships and executive roles, and any view they've expressed on the company or the industry. You can find all this in the proxy itself and online, Bloxham says.

Pay particular attention to director candidates' relationships to the company, its managers, and other board members, through past affiliations like jobs or universities or charity boards. If directors vote as a bloc, they will have a larger influence on the company's direction. You can also look up directors at cepr.net/blogs/director-watch and proxydemocracy.org, Bloxham says.

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.



It's a new game—and perhaps a tougher one

Critics claim shareowners are losing ground as the two remaining national providers restrict rights and flexibility.

by James Wynbrandt

ecent constriction in the fractional space and changes within the remaining programs are stacking the deck against shareowners, curbing rights, and cutting once-standard benefits, contend a pair of consultants who represent share buyers. We spoke with them about the trends they see and also solicited comment from the two largest national fractional-share providers, NetJets and Flexjet, both of which provided written replies to our queries.

First, the backstory: in 2013, Cleveland's Directional Aviation Capital (DAC), the parent company of the Flight Options fractional program, purchased competitor Flexiet from Bombardier, the last major aircraft manufacturer in the fractional arena. (Cessna and Raytheon/Hawker Beechcraft had already ended their programs.) Now DAC plans to convert Flight Options to a charter company, leaving Flexjet and industry pioneer NetJets as the only national fractional-share providers. Since peaking at more than 530,000 flights in 2007, meanwhile, fractional activity has steadily declined, falling to fewer than 360,000 last year, according to Argus International.

"[With] so few providers in the market, and so few aircraft within the programs, it makes it quite difficult for shareowners to get



the kind of flexibility they used to enjoy," said consultant Michael Riegel of AviationIQ.

Attorney Daniel Herr of FractionalLaw agreed, citing a reduced ability to downsize to a smaller aircraft at a cost savings. In the past, he said, it was "economically reasonable" to opt for a smaller aircraft when desired, but now, "downgrade fees are almost punitive. In some scenarios, it can cost more to downgrade than to fly the larger plane you own [a share in]."

While calling downgrades "real benefits of the fractional program," NetJets' Pat Gallagher, executive vice president for sales and marketing, said, "If owners are incented to continually fly

on aircraft they do not own, they deprive the owners of those aircraft from flying them," affecting everyone's "quality experience."

Flexjet countered that it provides a proportional discount on hours used when downgrading. That gives customers "flexibility in deciding which aircraft makes sense for a given trip," said Matt Doyle, the company's vice president of sales. (Fees for upgrading to a larger aircraft have always been high, to discourage owners from buying a share in a small airplane simply to gain regular access to a larger one.)

Customers concerned about raised exchange fees for smallercabin models should check program rules carefully and consider

workarounds. For example, if you're contemplating purchase of a one-eighth share in a large aircraft with the intention of downgrading to a smaller model for occasional trips, buying a one-16th share in each might be a better solution.

Several industry professionals contend that fleet purchases have become driven by discounts—which aren't passed along to shareowners at the expense of customer preferences. Herr cited the example of Gulfstream's G650, which has been in high demand, obviating the need for the manufacturer to offer discounts on purchases. That, he said, may explain why no fractional provider initially ordered the aircraft for its large-cabin fleet.



# REDEFINING THE TRANS-PACIFIC CHARTER EXPERIENCE



Forget talk of austerity campaigns or economic headwinds buffeting the People's Republic of China: demand is on the upswing for air charter connecting that country and the rest of the Pacific Rim with the U.S., with requests for flights to Asia climbing 15 percent last year, according to Avinode, the online charter marketplace.

Zetta Jet c

Helping to meet—and doubtless spur—the rising appetite for bespoke trans-Pacific charter is Singapore-based Zetta Jet. In barely one year, the company has created a new level of premium service with its owned and operated all-Bombardier fleet, featuring Global 5000 and Global 6000 ultra-long-range jets.

"We're establishing ourselves as the operator that consistently delivers the goods in terms of airplanes, service and price," said Geoffery Cassidy, Zetta Jet cofounder and managing director.

Though Zetta Jet is a young company, its management team has more than a century of experience in flight operations, international business and global luxury travel, and that background, along with a distinctive service model, is the foundation of its success. The company fuses Asia's renowned dedication to service with the "can-do" spirit of U.S. business aviation and the tradition and panache of European-style luxury.





Delivering this level of service requires operational capabilities, global support, knowledge and experience that few organizations possess. Zetta Jet's principals—cofounders James Seagrim, director of operations, and Matthew Walter, director of sales, along with Cassidy—cite five key factors that make the company an outstanding choice for trans-Pacific charter:

#### 1. THE FLEET

Trans-Pacific routes are among the longest in business aviation—nonstop flights can exceed 13 hours—so they require aircraft that are both extremely capable and comfortable. The new Global 5000s and Global 6000s that Zetta Jet operates are among the few business jets with legs long enough to serve these routes. Moreover, unlike the vast majority of charter operators, the company owns—rather than simply manages—its fleet, now numbering about a dozen Globals. (Zetta Jet expects to have 16 aircraft by the end of next year.) This eliminates the need to work around owners' schedules and keeps the company focused on the needs of its charter clientele. The fleet is supported by leading manufacturers' service programs, virtually eliminating AOG concerns, and is U.S. registered, giving the aircraft access to FAA-approved repair stations, as well as Bombardier's network of support facilities around the globe.

Unlike aircraft in other charter fleets, the ones operated by Zetta Jet don't feature monotone look-alike cabins; on the contrary, each airplane has been outfitted with its own distinctive interior. "By design, we're taking delivery of different cabin configurations, different color schemes, different everything," said Walter. "People like choice. Some customers want a double divan in the back; some want a huge bed."

To maximize flexibility and efficiency, Zetta Jet operates on a "floating fleet" model, meaning its aircraft have no home base. That lowers overhead and enables the company to offer pointto-point pricing for the growing number of customers seeking one-way trans-Pacific charters. "We're one of the few operators connecting Asia and North America successfully on one-ways," said Seagrim. "We're seeing more and more demand for these well-priced flights." Indeed, the company's jets are averaging more than 100 occupied hours per month.

#### 2. THE CUSTOMER EXPERIENCE

A charter flight should be an uplifting experience, not simply transportation, and passengers should feel more refreshed and energized when they disembark than when they boarded. Zetta Jet is dedicated to meeting each client's needs and preferences, ensuring their journeys are a delight from beginning to end. "We believe that no desire is too extravagant and no request too difficult to satisfy," said Seagrim.

Zetta Jet recruits its cabin crew from the world's finest aviation, hospitality and service organizations and provides them with further culinary and service training at Switzerland's École hôtelière de Lausanne. The company outfits its cabins with the finest Christofle silverware and luxurious Hermès Egyptian cotton linens and stocks galleys with Salon champagne. Passengers can access Early

#### "Each airplane has been outfitted with its own distinctive interior... People like the choice."







Window Content, including first-run Hollywood movies, via personal devices or onboard monitors.

The Zetta Jet fleet also features the fastest and most advanced Ku-band and Ka-band Wi-Fi, enabling passengers to use their smart devices to call, text and surf the web anywhere in the world. "We're putting the best system available in every airplane," said Cassidy. "Thirteen hours without good, consistent connectivity is no longer an option for our customers."

#### 3. TEAM KNOWLEDGE AND EXPERIENCE

Conducting trans-Pacific charters requires an experienced team that is collectively familiar with all facets of flight operations, international business and global luxury travel. Zetta Jet's three principals possess an impressive combination of expertise in these realms. "We know each other's strengths and bring complementary operational experience, regional knowledge and industry contacts to the enterprise," said Walter. A southern California native with a passion for customer satisfaction, he is a seasoned professional having dealt with premium business aircraft, and managed multiple fleets that included Bombardier, Gulfstream and, Hawker platforms. Based at the Zetta Jet operations center at Burbank Airport in Los Angeles, Walter leads the company's sales team, working in offices in New York; London; San José, California; Harbin, China; and Singapore.

Cassidy, raised in Australia and Singapore, hails from a family with deep roots in aviation. He began his aviation career working with private jet aircraft management, aircraft charter and flight support services out of Singapore and throughout the region. Based in Singapore, Cassidy oversees Zetta Jet's transactions, including aircraft acquisitions and financing; day-to-day operations, cabin experience and customer service also rank among his responsibilities.

Seagrim, born in the UK and now based in San José, oversees the flight-operations team, working at global operations centers in Los Angeles, London and Singapore. His extensive knowledge of aircraft acquisitions and regulatory compliance issues is augmented by significant flight experience; Seagrim is rated in Gulfstream-series aircraft and the Bombardier Global, and he is also a Global and Gulfstream check airman.

#### 4. OPERATIONAL EXCELLENCE

Due to its principals' record of exemplary regulatory compliance and operational excellence, Zetta Jet is the only Part 135 (on-demand air charter) operator approved by the FAA for flight through areas of magnetic unreliability—i.e., the polar regions. This is critical for trans-Pacific travelers, as polar transit provides the shortest route for many flights between the U.S. and Asia, allowing Zetta Jet to fly nonstop to many destinations that most other providers require refueling to reach.

The company's crews are based at strategic locations around the region, ensuring that resources are available to perform or amend any mission on short notice and deal with required crew changes. A charter customer from North America may, for example, "make four or five stops in China in a day and then end up in New Delhi," said Seagrim, "and that requires two or three crew swaps."

The company rigorously pursues excellence in all areas related to safety, security and privacy, maintaining ARG/US Platinum and Wyvern Wingman safety ratings, and Air Charter Safety Foundation and International Business Aviation Council (IBAC) memberships. Staff and crew are committed to continuous education and re-certification by all relevant safety and regulatory bodies worldwide and to ongoing culinary and service training.

Zetta Jet's operations continue to expand as its fleet grows. The company is in discussions with Bombardier about acquiring

#### "The cabins are outfitted with the finest Christofle silverware and luxurious Hermès Egyptian linens."







Global 7000s, which will feature spacious four-zone cabins and a 7,400-nm range, allowing nonstop flights between London and Singapore; Washington, D.C., and Beijing; and New York and Dubai. "I think it will be a game changer," said Cassidy. "It's really going to transform the landscape of ultra-long-haul flights."

#### 5. PERSONALIZED SERVICE

The cabin of a long-range business jet is no place for cookie-cutter customer service. Zetta Jet tailors all aspects of every flight to the preferences and needs of each client, creating experiences for individuals, business groups and families that incorporate the best the world has to offer in service and amenities. A wide choice in menus, including catered meals from Michelin-starred restaurants, selections from carefully curated wine lists and a vast library of current and classic onboard entertainment options ensure the most eclectic tastes are sated. With cabin crews representing some 20 nationalities, Zetta Jet pairs passengers with an attendant who is intimately familiar with their culture and language, as well as their preferences in all facets of service. The variety of the fleet's cabin layouts and interior designs ensures the aircraft will be ideally matched to the mission.

The personalized offerings extend to the access plans available. Zetta Jet offers ad hoc charter for occasional use, as well as 100-hour block-charter programs providing significant discounts, guaranteed availability and exchange arrangements between the Global 6000 and 5000. "It's like owning your own airplane, without having to write the big check," said Walter.

"We're seeing more demand for trans-Pacific flights than ever before," said Cassidy. "We feel good about the direction it's going." The company's trans-Pacific charter customers apparently do, too.





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OUT SAVING TIME IT'S ABOUT V



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Arrive London in time for The Royal Ballet



Flexjet—which did subsequently order G650s and is the North American launch customer for the highly anticipated G500—disputed Herr's assertion. "We do not buy aircraft based on OEM discounts," said Doyle. He added that when a large order results in a discount, "we seek to reflect it in the fractional-share purchase price."

At NetJets, Gallagher said the first priority is meeting "needs and wants of owners." He noted that given his company's volume purchases, "we do receive some discounts, but when you spend a significant amount customizing the aircraft"—he cited inflight entertainment systems and exclusive, high-end interior appointments and furnishings—the discounts "aren't as significant as you might think."

I f you're exiting a share, your unused flight hours can no longer be part of the deal: "Owners are restricted from transferring unused hours with the sales of their shares," said Herr.

Gallagher contended that share transfers "are extremely rare in the NetJets program, and therefore this hasn't been an issue," while Doyle pointed to Flexjet's Versatility Plus program, which allows owners to buy and sell unused hours among themselves.

Herr, perhaps most damningly, charges that "many programs have no compunction about selling shares at inflated prices, preferring hidden markups to leveling with customers about the true cost of the services being purchased." Said Riegel, "When providers show me spreadsheets, I don't believe the numbers I see anymore."

Responded Flexjet's Doyle: "We provide our owners with full transparency into valuation; they also are sophisticated shoppers...who have access to market intelligence about pricing and valuations and can reflect that intelligence in their decision-making."

Gallagher said that "the price for preowned aircraft in our fleet, like any asset, varies widely at different times based on micro- and macro-economic factors," and that "when buyers sell their shares, the evaluation provision in our contracts ensures every buyer has the opportunity to exercise the independent appraisal process."

But does Bombardier's exit from fractional ownership leave Flexjet

owners more vulnerable to potential financial calamities? "We no longer have a manufacturer in the business," said Riegel. Industry observers have suggested Bombardier was more capable of and willing to support Flexjet and its then all-Bombardier fleet, to protect the value of its brand, than a private equity owner would be.

DAC's principal, Kenn Ricci, disputed that contention, saying his company "has the resources to meet its commitments, even in the case of another black-swan-type event such as the financial crisis and recession of 2008–09."

Meanwhile, as for tax advantages of ownership that fractional shares offer, Herr believes they're "nowhere near as significant as the press thinks," due to changes in the Jobs Act of 2004, which provided bonus depreciation but "implemented draconian measures on personal use" of aircraft, which he said have reduced purchase demand. He called aircraft manufacturers "shortsighted" for having supported the legislation. "The

IRS gained far more than did the [manufacturers], and aircraft sales have suffered accordingly."

What's a shareowner to do? Riegel said some of his clients are considering alternative ownership strategies, driven in part by outstanding values in the preowned market and demand for quality lift from charter operators.

He cited a client who recently closed on a Learjet 45 purchased for "just a little north of \$2.2 million." When you calculate in all the costs, said Riegel, "he's paying less than half per hour what he would have in a share." Moreover, owners can negotiate deals with charter operators who will guarantee charter revenue to help offset operating costs, making full ownership more affordable. Some owners are also banding together for joint ownership of one aircraft, according to Riegel, creating an independent fractional company of sorts.

espite the bad-mouthing, the fractional model doesn't appear in danger of extinction; there remain enthusiastic users, Riegel said, who appreciate the new aircraft in fractional fleets and the reliability of the service. However, he added, "Those who have hard-core requirements or want the newest aircraft are being much more circumspect about the number of hours they're using. Ten years ago, they might have had about 150 hours per year [in their share]; today it's typically 50 or 75."

As Herr also admitted, "For people who place a premium on safety, consistency, and convenience, fractional is still the place to be."

James Wynbrandt (jwynbrandt@bjtonline.com), a private pilot, is a longtime BJT contributor who has written for the New York Times, Forbes, and Barron's.

In the past, said consultant Daniel Herr, it was "economically reasonable" to opt for a smaller aircraft when desired, but now, "downgrade fees are almost punitive."





# Brucz dickinson

His hugely successful rock band, Iron Maiden, plays heavy metal. The group flies in some heavy metal, as well.

by Liz Moscrop

ruce Dickinson sings lead with the British rock band Iron Maiden, which formed in 1975 and has released 38 albums, many of which have achieved gold or platinum sales status in the U.S. and U.K. Dickinson joined the group in 1981 and has been with it ever since, with the exception of a six-year period beginning in 1993, when he left to focus on a solo career. He and his bandmates are currently on a five-month, six-continent tour to promote their first album in five years, *The Book of Souls*. They're traveling—along with 12 tons of equipment—in a vividly liveried leased Boeing 747-400, dubbed "Ed Force One," after the band's mascot, "Eddie."

An avid aviator, Dickinson worked as a pilot for the now-defunct Icelandic airline Astraeus. He is type-rated on the Boeing 737 and 757 and expects to soon be type-rated on the 747. (He is finishing his training on that model during the current band tour.) He also co-owns Cardiff Aviation, in Wales, U.K., with business partner and ex-Astraeus CEO Mario Fulgoni. That organization, based at a former military airfield with a 6,000-foot runway, serves as a pilot-training center. It is also a maintenance, repair, and overhaul facility that employs about 100 people and has approvals to work on all Boeing narrowbody types. It recently won a contract to support the African nation Djibouti's national airline.

Dickinson is chairman of Aeris Aviation, which distributes the Eclipse jet in the U.K. (on which he is also type-rated), and he owns, flies, and displays a replica Fokker Dr1 403/17 triplane with the Great War Display Team. He is an investor in the Airlander project, which is building the world's biggest airship, and chairman of the U.K. charity Flying Scholarships for Disabled People.

As if performing with a rock band and multiple aviation activities weren't enough to keep him busy, Dickinson has several other sidelines. He played a major role in developing Iron Maiden's Trooper beer, which is sold in 55 countries. He is an Olympic-standard fencing champion and the host of radio and TV shows. And he has turned out a pair of successful satirical novels, The Adventures of Lord Iffy Boatrace and The Missionary Position: The Further Advances of Lord Iffy Boatrace.

Oh, and he has just recovered from cancer.

A modest man who eschews iPhones in favor of a 10-year-old Nokia, he once told Britain's *Daily Telegraph*, "Life is too short to do the things you don't love doing. If your only arbiter of anything is money, really you should...go and rob banks."

PHOTOS BY CAROL MOIR EXCEPT WHERE OTHERWISE INDICATED.







I was rubbish at math and physics, and I talked myself out of applying to the Royal Air Force.

Luckily for the U.K. military I became a rock singer instead.

#### How's your health these days?

It's been great. It's almost a year to the day since I got my diagnosis. It's interesting to reflect and think, "Where was I a year ago?" The powers of recuperation are quite incredible. I say, "Good little body, thank you very much."

# That's wonderful news for you and your fans, and I suspect it offers encouragement to anyone who has cancer.

I've been astonished at the number of people who have sidled up to me and said, "Oh, well done," and it turned out that they had had exactly the same [tongue] cancer that I had. One guy instructing me on the 747 had it 15 years ago. I was in Djibouti and along comes a British diplomat who said, "Guess what?" and he has the

same cancer. It's extraordinary how many people pop into your life after the diagnosis and you share a common experience.

#### What resources did you draw on to help you recover?

I treated it as a project. You go through stages of anger or feeling sorry for yourself. I thought, "Enough of this. It's not going to do me any good." It's not my natural state, and it won't affect the outcome. What will affect the outcome could be a positive attitude...[and] knowledge. Knowledge of what was going on with your body, understanding of the nature of the disease, understanding of the drugs.

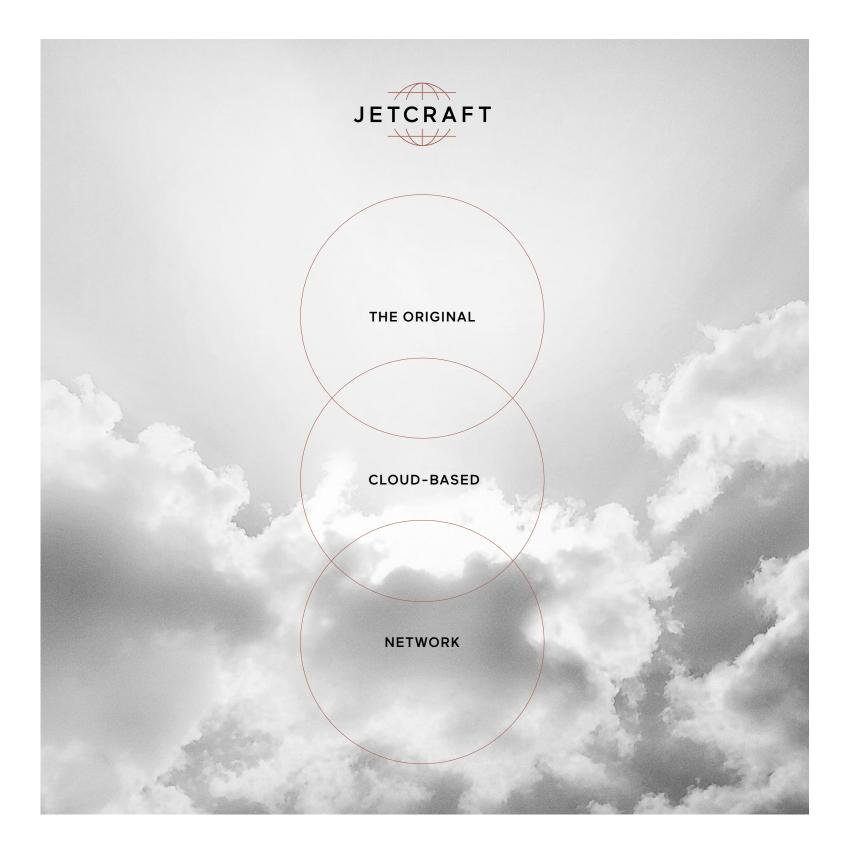
And [learning about] it gives you something to do. Having cancer is bloody boring because you sit there and you take your drugs and can't really do a lot. You're wiped out, and you run out of shows to watch on daytime TV.

I think a dark sense of humor helps. My wife was unbelievable. In a sense it's harder for the people around you because the two worst bits about it are one, not knowing; two, the people around you who don't know what the outcome is going to be, and they're also not going through what you're going through when you're going for the treatment. You don't dwell on the bad stuff, unless the bad stuff happens. It's like engine failures on airplanes.

#### Speaking of airplanes, when did Bruce the aviator come in?

Until age 30, plastic airplanes and Biggles were as far as I got. [Biggles is a fictional British storybook hero, who was a World War II pilot. —Ed.] I was rubbish at math and physics, and I talked myself out of applying to the Royal Air Force. Luckily for the U.K. military I became a rock singer instead.

I was always interested in aviation. We were in Jersey writing an album and Nicko McBrain, our drummer, decided to learn to fly. Then I was on a family holiday in Florida, so I tried a lesson. My life changed. Every little boy has a fantasy. My heroes were U-boat captains, test pilots, astronauts, and fighter pilots. I got to fly a Cessna 152, and I thought, "Wow, this is incredible."



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### And now you fly a stunning Boeing 747-400. How did you feel when you saw it for the first time?

Absolutely jaw dropping. What we've got here is something unique that differentiates us. When we did the [tours with a] 757 it was a bit of a first, and the straightforward business case for it became apparent. After doing it once around the world, the management came up to me and said, "Can we do it again?" We did three times around, and then sadly Astraeus went under. This [747] aircraft just cropped up.

#### What advantages does it offer?

The greatest benefit of traveling in a 747 is that because of its colossal size and freight capacity we can carry our stage production and all our stage equipment in the cargo hold without having to make any of the immense structural modifications needed to do this on the 757. Although in reality we cannot carry much more gear, the savings in complexity, time, and cost make using

the 747 even more practical. There is much more room for band and crew. Furthermore, it is marginally faster—Mach 0.85—and the range of around 7,000 nautical miles is much greater, which means we will not have to make the refueling stops we needed to with the 757.

#### How does the band work? Do you write the songs together?

Everybody writes on their own, and then we all tend to meet around each other's houses. It's a bit like how we used to write when we were school kids.

### You're upbeat, yet you have a dark sense of humor. *Book of Souls* has a lot of darkness in it.

When we wrote *Book of Souls*, I finished it and then got sick. It is a dark album. If you look now at the world, there are all these kind of millennial groups and apocalyptic people springing up all over the place. I think it tends to reflect in

people's psyches, and musicians are no different [than anyone else].

# One of the tracks, "Death or Glory," is about World War I dogfighting tri-planes. How do you find that kind flying with your replica Fokker Dr1 403/17?

That is some of the hairiest flying I've ever done. These airplanes have quite primitive wings in terms of their stall characteristics, and were comparatively slow. We get up to around 120, 130 miles an hour. We're flying, chasing each other 50 or 100 feet off the ground, or doing head-on passes. However, we've got a great big whirling prop at the front, chucking out a big old slipstream. I've almost been inadvertently knocked upside down, 50 feet above the deck in a World War I full-size replica. Trust me—it gets your attention.

You think about where to position the airplane so the spectator gets a great view, but you also keep yourself out of the firing line in terms of



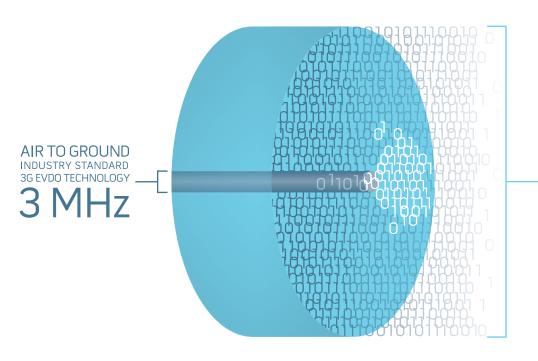
Because of the 747's colossal size and freight capacity, we can carry our stage production and all our stage equipment in the cargo hold.



#### **FASTFACTS**

- NAME: Paul Bruce Dickinson
- BORN: Aug. 7, 1958 in Worksop, Nottinghamshire, U.K.
- OCCUPATION: Lead singer of the heavymetal band Iron Maiden. Also, owner/investor in aviation businesses, radio and TV show host, novelist, and former airline pilot.
- ➤ TRANSPORTATION: Boeing 747-400 (leased). Owns replica Fokker Dr1 403/17 triplane. Co-owns SA Bulldog and World War II–era Bücker Jungmann biplane trainer.
- EDUCATION: Attended school in Sheffield and university in London.
- PERSONAL: Lives in Chiswick section of London and has three children with second wife, Paddy Bowden: Austin (born 1990), Griffin (born 1992), and Kia (born 1994).

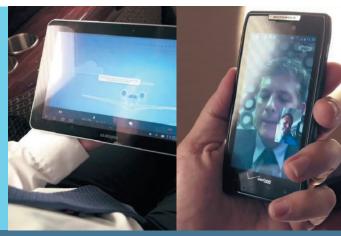
# SMARTSKY'S 4G NETWORK SPECTRUM ADVANTAGE



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the slipstream. You're thinking about what the spectator sees, not necessarily what might be effective in combat. It's almost like you're the actor and the director when you're in a display, because you're doing the performing, but you are creating a moving image.

#### So you think in pictures all the time?

It's the same thing with fencing. I wanted to do boxing, because I wanted to fight people. Boxing seemed like a fair enough way to do it, but they didn't do boxing at school. A bloke turned up and said, "Any kids fancy learning to sword fight?" I realized that was way more exciting than thumping somebody in the head. You could get the whole combat thing, but without the brain damage, and suddenly my desire to fight people was very much muted. The one thing about fencing is that



Iron Maiden's Boeing 747-400	
Variable cost/hour for latest model	\$23,895
Seating (exec/max)	19/416
Range (four passengers)*	8,175 nm
Range (19 passengers)*	8,100 nm
Maximum cruise speed	533 kt
Maximum takeoff weight	875,000 lb
Cost new	N/A
Cost range used	\$50-\$100 million

Sources: Conklin & de Decker Aircraft Cost Evaluator and Aircraft Performance Comparator: Vref Aircraft Value Reference.

**Assumptions:** Jet fuel, \$6.20/gal; variable cost includes fuel, maintenance reserves and misc. expenses.

Range based on passengers weighing 200 lb each, including baggage, NBAA IFR fuel reserves. 200-nm alternate.

there's always somebody out there who can beat you and you'll always have to come up with a different strategy. No two days are ever alike. Welcome to aviation!

# There's a lot of physicality in what you do, whether it's fencing, being a pilot, or being a singer. Why is that?

It's all three-dimensional space, and I'm a tactile learner. Somebody once said, "What's the point of words when equations say it so much more elegantly?" With me, it's the other way around. I would rather read a half page of words and understand the concept than look at a line of X squared equals Y squared equals gobbledygook, but that's because I don't have that kind of a brain. Probably about two-thirds of pilots are X-squared, Y-squared types. The math thing is an expression of how things actually work, but you don't need to reduce your life to a series of equations.

#### What drew you to the charity Flying Scholarships for Disabled People?

I got involved with FSDP when I was invited to sit in on its selection process. I'd been invited to fly with Nathan Doidge, "the most disabled pilot in the world" [Doidge's nickname for himself], which was a humbling experience. The scholars are so inspiring. The determination that they use to face the challenges that they face, and the mental toughness they display, is remarkable. FSDP brings them back to life and back into the real world away from the depths of depression.

#### How long will you keep working with Cardiff Aviation?

I don't understand this exit nonsense. If I'm generating 30 or 40 million [pounds] a year and we're making five million or more on that, and I'm enjoying the business, why would I exit? If I do exit, what do I do then? Sit in my pile of cash and be too old to enjoy it?

Liz Moscrop (Imoscrop@bjtonline.com), who is based in the U.K., has interviewed John Travolta and Jackie Chan for BJT.

I was always interested in aviation so I tried a lesson.
My life changed. I got to fly a Cessna 152, and I thought, 'Wow, this is incredible.'





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View the timelapse here: www.DuncanAviation.aero/videos/sexyjet





# Cirrus's Vision SF50

by Mark Huber

ine years ago I stood in a Cirrus Aircraft hangar in Duluth, Minnesota and witnessed the unveiling of what was then reportedly the slowest single-engine private jet you could buy. At the time, and in the years that followed, the "very light jet" industry ballooned into full vapor with single-engine models in development from manufacturers including Aerocomp, Diamond, Eclipse, Epic, Flaris, Maverick, Piper, Sport Jet, and Stratos.

Aviation is a business that attracts dreamers, and some dreams die hard. A couple of those programs are still alive, but none of them have come to fruition. Today, the Cirrus Vision SF50 is the *fastest* single-engine business jet you can buy, because it's the only one with market viability. FAA certification could come within weeks, and the company has a backlog of more than 600 orders accompanied by substantial deposits.



#### NEW AIRCRAFT PREVIEW

The airframer designed the \$1.96 million (2012 dollars) carbon-fiber SF50 to be flown single pilot, and by pilots with limited or even no previous turbine-aircraft experience. (However, all will need to complete a typerating course.) Power comes from a Williams International FJ33-5A turbofan (1,800 pounds of thrust) mounted on the aft center of the fuse-lage and then canted at a descending angle, positioning it so that it blows vectored thrust between the "V-tail."

If you think you've seen this setup before, you probably have. It's similar to the design of the U.S. Air Force's giant "Global Hawk" unmanned aerial spy vehicle. The engine positioning gives the airplane a more flexible center of gravity for loading, makes the engine easier to service and inspect before flights, and mitigates on-board noise and any damage to the cabin from an uncontained engine failure.

The Cirrus Perspective cockpit features the Garmin G3000 system with three touchscreen avionics controllers powering the two large main display screens. The system incorporates builtin flight-envelope protection to prevent a loss of control and is easy to use. Enhanced vision system and enhanced real-time weather radar



In the cockpit, three touchscreen avionics controllers power two large main display screens.

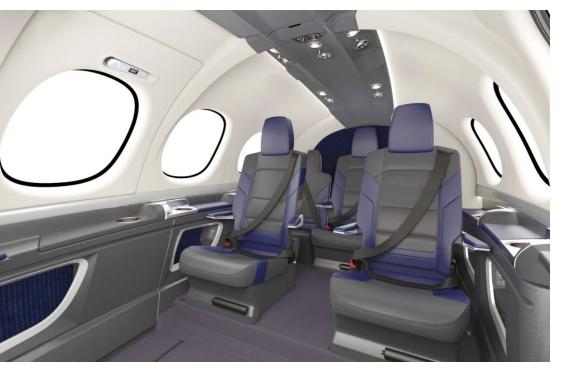
are optional. Flight-control inputs are made via sidesticks, allowing for a roomy cockpit.

Because the aircraft isn't yet certified as I write this, performance numbers are estimated, but they should be pretty accurate. Service

ceiling is listed as 28,000 feet, a little lower than the ceiling for a high-performance turboprop single like a TBM 900 (31,000 feet) and a lot lower that that of an entry-level twinjet like the Eclipse 550 (41,000 feet). As a result, you will not be able to out-climb all rotten weather.

Maximum cruise speed is 300 knots and maximum range is 1,250 nautical miles, albeit at a slower 240 knots. At 300 knots, you can make 1,100 nautical miles. The SF50 shines as a short-field performer, taking off in as little as 2,036 feet, landing in 1,721 feet, and stalling (full flaps) at just 67 knots. It climbs at a respectable 2,000 feet per minute.

Aerodynamically, the bird is slick, but you can slow it down in a hurry by extending the landing gear at 210 knots, dropping the first notch of flaps at 190 knots, and dumping the rest at 150. Basically, you can go from 300 knots to approach speed in under a minute. And the beefy, trailing link main gear will even out all but the most inept landings. Like Cirrus piston aircraft, the SF50 features a handle that deploys a whole-aircraft parachute, a last resort when things go terribly wrong. Through April, Cirrus estimated that its Airframe Parachute System had saved 129 lives on its piston aircraft since the late 1990s. (Nearly all these incidents resulted from pilot error; and the fatalaccident rate is considerably lower for Cirrus's



The comfortable cabin features luxurious automotive-style leather seats.



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YOUR JET IS READY



line of parachute-equipped, piston-powered SR aircraft than for general aviation overall.)

The SF50 will be certified for flight into known icing and fitted with pneumatic deicing boots. With full fuel (296 gallons) you can carry just 400 pounds—basically the pilot and one passenger or the pilot and a lot of gear—although the SF50 features modular seating for up to five adults and two more optional jump seats suitable for small children. Still, with pilot and four passengers weighing in at 200 pounds each, the SF50 will take you 600 nautical miles at 300 knots.

The overall useful load—passengers, gear, and fuel—is 2,248 pounds. The heated external baggage hold, while only 31 cubic feet, is large enough for a set of golf clubs. Passenger comfort for an aircraft in this category (6,000 pounds) is excellent: the cabin is about five feet wide and four feet high, and nearly 11 feet long. The interior fit and finish is above average for an aircraft at this price point, with luxurious automotive-style leather seats, high-end substrates, generous seat tracking, sidewall cut-outs for personal-item stowage, cup holders, armrests, USB power ports, airbag seatbelts (crew positions), and climate-controlled air-conditioning, with options for enhanced interior lighting,

#### At a Glance



Source: Cirrus Aircraft (all performance data preliminary)

drop-down entertainment screens, Wi-Fi-groundlink, and 115V AC power.

For Cirrus, the road to the SF50 has been a long and twisted one. Brothers Alan and Dale Klapmeier started the company in a Baraboo, Wisconsin barn in 1984, and by 2015 it had sold 6,000 of its innovative line of SR single-engine piston aircraft. The airframer began serious work on the jet in 2003 at an offsite

Minnesota location it called "The Moose Works." The 2007 mockup was the third jet iteration, and it would undergo another redesign on the way to certification.

The current SF50 is the culmination of almost three decades of looking at the potential personal jet market for Cirrus. The company began studying the concept in the late 1980s, when it investigated the possibility of fitting its VK-30 kitplane with a Williams FJ44 turbofan. During the 1990s, Cirrus developed a turboprop variation of the VK-30, the ST-50, in partnership with Israviation; however, that aircraft never entered production.

It wasn't until China Aviation Industry General Aircraft purchased Cirrus in 2011 that the SF50 development program was properly capitalized and its future became assured. Now Cirrus plans to ramp up SF50 production to 125 aircraft per year. The concept of an "affordable jet" may be an oxymoron, but the thoughtful, innovative, and just downright fun Cirrus Vision SF50 is the closest thing to it.

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





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As CEO of Wyvern Consulting, he oversees an auditing business that helps assure air charter passengers that flight operations are safe.

interview by Charles Alcock

rt Dawley is CEO of Wyvern Consulting, which for 25 years has provided riskassessment and safety-audit services for the air charter industry and its customers. The U.S.-based group has established the well-regarded Wingman Standard, a set of guidelines intended to give charter customers peace of mind about the level of safety they can expect from aircraft operators and their flight crews.

Dawley knows the intricacies of private aviation safety, having worked in the field since the mid-1980s. He started his career as the captain with a Los Angeles-area charter company and rose to become director of flight operations for Peterson Aviation. Then, in 1998, he established DreamWorks Studios' flight department for film director Stephen Spielberg, operating a Bombardier Global Express and a Gulfstream G550.

In 2004, Dawley left Spielberg to form his own air charter and aircraft repair business in Costa Rica and began providing Spanish-speaking safety auditors to support Wyvern. Nine years later, Wyvern invited him to run the company.

**BJT** visited Dawley at Wyvern's headquarters in Yardley, Pennsylvania to find out why private aviation consumers need to be concerned about safety and how they can reduce their exposure to risk.

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#### INDUSTRY INSIDER

# Why should charter customers care that operators pass a Wyvern audit? Isn't it enough that the FAA approves them?

The minimum standard in the industry is regulatory [FAA Part 135 regulations]. Safety management currently is not required, and that's what the Wyvern Wingman audit focuses on.

# What about the International Standards-Business Aircraft Operations [IS-BAO], developed by the International Business Aviation Council? Isn't it sufficient that operators comply with that, since it does cover safety?

The benchmark in the IS-BAO process is a strong one; we use it as the basis for much of what we do [but it]...is [just] a snapshot [of that operator's safety standard] at that time.

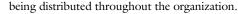
In the Wyvern Wingman program, that is only the beginning of the process. The pilots, the aircraft, and the organization all have to continually supply updated information to our system to ensure that benchmarks are being met. Those benchmarks have to do with pilot experience, maintenance practices, and insurance. We do continual background checks that are not supplied in a regular audit. I think that the end users like to know that practices are continually being assessed.

## What safety-management-system factors do you monitor?

For the most part, we are looking for hazard reporting from flight crews about potential unsafe conditions. An audit can also involve reports from the dispatch department. We are looking for safety communication in the organization and for effective recordkeeping. The process also involves setting key performance indicators, safety targets, and how to handle communications, such as safety meeting minutes

### RÉSUMÉ:

- BORN: Feb. 11, 1958 (age 58), Cincinnati
- **POSITION:** CEO, Wyvern Consulting (2013–)
- PREVIOUS POSTIONS: Owner/president, Paradise Air (Costa Rica air charter provider), 2004–2013; president/owner, Helicorp (Costa Rica aircraft repair station), 2005–2012; senior captain, Dreamworks Aviation (1998–2004); director of flight operations, Peterson Aviation, 1988–1998
- **EDUCATION:** B.S., Business Administration and Finance, California State University, Chico, 1981
- **PERSONAL:** Lives in Yardley, Pennsylvania. Hobbies include golf, reading, and fishing.



We see a lot of conflict between sales and operations departments, where they need to sell a long charter that bumps up against a very long duty day or potentially exceeds it. If there are creative and legal ways of making that flight happen, [it's important that] the flight crewmember still has the opportunity to express concern in a non-punitive and confidential environment.

#### Do you find that's sometimes not the case?

We run into cultures that handle issues like that in a different manner. Safety management should be adopted in a similar manner on a global basis. In the U.S., there are programs designed to encourage operators to report issues like that without fear of punitive action by the authorities, unless it involves criminal activity or gross negligence.

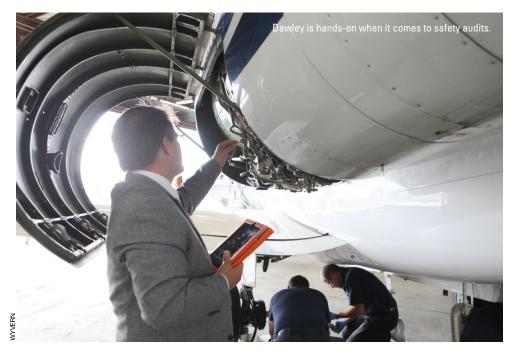
## How do you keep your safety standards up to date?

We have attempted to evolve our programs so that they adapt to changes in the industry. As training gets better, we reassess the standards. Do you really assess a 20,000-hour pilot the same way you would a 5,000-hour pilot? Should the guy who built his career in the '70s and '80s with fewer training resources and avionics capabilities be seen in the same way as a pilot today?

We want to ensure that [our standard] is not so restrictive that operators that meet similar operating practices and benchmarks but may not meet what we required in the past can be included in our preferred vendor program. We use the data in the ongoing collection and analysis to make those types of calls. It is our hope that any weakness or nonconformity in the audit will get corrected as part of a continuous-improvement program and that the operator ultimately becomes successful inside of our vendor pool.

# Should private aviation consumers flying in certain parts of the world be particularly concerned about which operators they use?

They should be very concerned. In certain regions, the gray charter market exists [in which operators who lack legal approval to fly commercially provide lift]. You have a lot of money





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#### **INDUSTRY INSIDER**

coming into emerging markets—people investing in aircraft and using them in ways that are not under a regulated framework. Our clients expect that when they go to these regions they at least will be able to assess that there are operators that have complied with the same benchmarks as their local charter operators. But I want to add that the gray-market area is also a problem in the U.S. and Europe.

## Might some operators just not be aware that what they are doing is illegal?

For the most part, they are very aware but there are significant pressures to offset operating expenses for their aircraft. Our idea is not necessarily to spotlight those people that do not [operate legally], but to spotlight and promote those people that do embrace top-rated practices.

The whole concept of promoting a just culture inside the organization starts at the top. It is incumbent upon top management to promote safety, with a safety policy letter that is signed by them and holds them accountable for the safety approach of that organization.

# What risks might passengers be exposing themselves to if they use operators who don't promote safety?

Without regulatory oversight at a very minimum, and hopefully a third-party assessment from Wyvern Wingman or something similar, they have absolutely no benchmark to assess the person they are getting on a plane with. They can't confirm the operator's legal status in the country or whether the pilots work fulltime for the organization. They can't confirm whether the pilots have been trained, whether they have embraced any type of safety management, or the maintenance status of the aircraft. There have been some high-profile accidents in the last several years that bear out the importance of that.

## What sort of fail rate do you have for Wyvern Wingman audits?

Before we sell an audit service, we make sure that we go through the Wingman Standard step-by-step so the operator understands the expectations. There is an occasional situation in which an operator is not successful against the benchmark. If [that's because of] what we consider minor non-conformities, they are asked to submit a remedial action plan, generally within 30 days, [so the] non-conformity...can be addressed. Then we reassess. The failure rate is probably less than 10 percent because the expectations are laid out clearly.

# The business aviation industry is such a closely knit community. How can people be sure that the audit process is independent?

It is important to stress that we have a small pool of auditors that have direct relationships with Wyvern. They don't work for other third-party organizations. We have a product called PASS—Pilot and Aircraft Safety Survey—which is a mission-specific report card issued prior to a charter flight. That basically validates the people flying on the aircraft, the organization, its audit results, insurance, and those types of things. There has never been a fatality in a PASS-compliant flight.

One trend we're seeing in the charter market is the emergence of companies using digital technology to provide ways for people to book their own flights. Do you think that

removing human interaction with a broker from the equation means that consumers might not pose the right questions?

I have great concern about that. Brokers serve a valid purpose in providing clients with the information we talk about in the Wyvern program. The responsibility of any charter broker is to make risk management and safety their objective. Do you encounter brokers who don't do that?

It is a non-regulated industry; all you need is a telephone and computer to get into the business. Again, several high-profile accidents have resulted from brokers that obviously had little experience and certainly didn't intend to make safety and risk management their final objective.

We spend significant time trying to track down the brokers that are promoting certain operators as Wingman compliant [when in fact they aren't]. If there were a mechanism on an online booking tool to provide that assurance before the flight I would be foolish to not consider it. Our concern is that if an online tool has an agreement with us and is promoting operators as Wyvern compliant they need to ensure that indeed they are current and compliant and that a PASS report has been run prior to each flight.

That is the only way that they can confirm that that flight has met the benchmark in the Wingman system. It is a report card that tells you that the operator is current in the Wingman program, has been audited within 24 months, and is providing verifiable data. We look at current operation specifications,

"Passengers should be very concerned. In emerging markets, people are investing in aircraft and using them in ways that are not regulated."

#### "I think the end users like to know that practices are being assessed."

air operator certificates, and insurance certificates. And then we look at the aircraft itself, the age of it, the maintenance status.

And we look at the pilots. How much has a pilot flown in the last 90 days, and was it on that particular type of aircraft? How much he has flown in the past year? Has this pilot had a violation in his background? Does he have accident incidents on his record?

The PASS Report gives you an assurance when you step onto an aircraft that you know all that is reasonably possible to know about its condition and that it is being operated in a legal and responsible manner.

#### What state generally do you think the charter market is in today? Is the increased competition and price-sensitivity a safety concern?

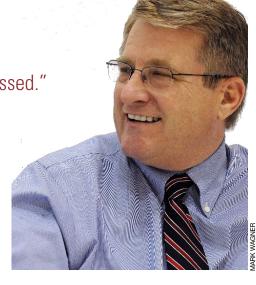
Demand has improved, but so has supply. It is a very competitive environment. The big concern for us is that when a charter organization is looking to become more and more

efficient, some [safety] areas that really matter to us could be compromised, particularly pilot training, maintenance, internal oversight, those types of things.

#### You see that happening?

I believe there are those pressures and I do believe corners are cut quite often. We see it in the audit process. We have even had occasion—and it doesn't exist now to my knowledge—where we have had to remove an operator from the Wingman program even after a successful audit within the preceding 24 months because there was evidence of some of those corners being cut.

In many cases, the end-user engages more than one broker to bid a trip and so you get a lot of bidding activity and price ends up being the determining factor of the flight. If it is a Wingman operator, even if it goes through that [competitive bidding] process, the end-user has every reason to believe that those safety objectives have been met.



We would like to grow our vendor pool, but we have high expectations and a lot of people will look to other [safety audit] processes that are easier to obtain, other certifications. Ours is the most difficult. We know that, we have been told that, and that becomes the challenge on a business level to grow the product.

Charles Alcock (calcock@bjtonline.com) is editorin-chief of AIN Publications, publisher of BJT and other aviation magazines.



Truth or Consequences

The FAA's leasing regulation does little but create problems.

by Jeff Wieand

he Truth in Lending Act of 1968, requiring "full disclosure of the terms and conditions of finance charges in credit transactions," was an unlikely inspiration for the FAA to enact a regulation requiring a "truth in leasing" clause in aircraft leases. Under that regulation (FAR 91.23), which applies to aircraft weighing more than 12,500 pounds (including most business jets), leases must contain information about operational control and other matters. Moreover, that info must be in "large print" and must appear immediately above the signatures of the parties, presumably to enhance the likelihood that they might actually review it.

Unlike the Truth in Lending Act, the leasing regulation doesn't really require disclosure from one party to another. Instead, it mandates that the lease incorporate an agreement between them about certain issues.

The first issue is maintenance. The truth-in-leasing clause must identify the section of the FAA regulations under which the aircraft has been maintained during the last 12 months and include a "certification by the parties" to the lease

regarding compliance with those regulations. This "certification" can simply be a statement that the aircraft has been, and will continue to be, maintained and inspected under, say, FAR 91.409(f)(3). Of course, while FAA inspectors, maintenance technicians, and aviation lawyers may know what FAR 91.409(f)(3) is, it's unlikely that the guy about to lease the G550 will have a clue.

Second, the name and address of "the person" responsible under the lease for operational control of the aircraft must be typed or printed. This seems to contemplate a single person, but the regulation goes on to require "certification that each person understands that person's responsibilities for compliance with applicable Federal Aviation Regulations." Does this refer to the lessor and lessee, or someone else?

Finally, the lease must state that "an explanation of the factors bearing on operational control" and the FAA regulations can be obtained "from the nearest FAA Flight Standards district office." One wonders how many people have paused before signing a lease to consult the nearest FSDO. One

also wonders what sort of reception they would receive if they did.

What is the FAA worried about? In February, the agency tried better to answer this question by replacing a 37-year-old Advisory Circular on truth in leasing with a whole new version. One concern noted in the 2016 circular is that "there are some irresponsible companies which may use various ways to confuse the issue concerning who is the actual aircraft operator." As an example, the FAA cites a "sham dry lease," which by its terms appears to pass operational control of the aircraft to the lessee when in fact it is retained by the lessor, usually because the lessor directly or indirectly employs the pilots. Such a lease would require the lessor to hold a commercial certificate issued by the FAA, which the irresponsible company presumably

lacks. The FAA recently issued a cease-and-desist order against parties charged with operating a sham lease, which was followed by a lawsuit by the Department of Transportation when the alleged violations continued.

ne would assume the FAA's intent is to protect the lessee, which is the ignorant party in the sham dry lease. But the lessee has not been duped into believing it is free of responsibilities that it has (in reality) assumed under the lease. On the contrary, the lessee thinks it has responsibility for operational control when in fact it does not. The FAA's real concern, then, would appear to be that the lessee is in effect accepting a charter service from a lessor "that is not certificated to operate charter flights."

As a result, the lessee may be forgoing "the protection of certain



safety standards required by the FAA" for certificated charter operators. But while this may be true, the sham lease leads you to the opposite conclusion. Rather than operating under the mistaken assumption that the lease provides the safety protections of charter, the sham lease in fact leads the lessee to think it has operational control under Part 91. In other words, the typical rationale for the enhanced operational requirements and restrictions of Part 135-that the public has a right to expect a higher bar of safety in "commercial" aviation—doesn't apply.

Several other truth-in-leasing strictures bear mention. The lease has to be in writing and a copy must be kept on the the mailed copies. I've certainly never heard of an FSDO employee running out to an aircraft after receiving a first-flight notice and saying, "Let me see that lease!"

Perhaps the most remarkable thing about the truth-inleasing regulation is that by its terms it doesn't apply if the lessor or lessee has a commercial certificate, such as a Part 135 air carrier certificate. In other words, the FAA requires no truth-in-leasing disclosure when a lessor executes a sham lease purportedly passing operational control to the lessee so long as the lessor is a certified air carrier! The fact that the lessee mistakenly believes it has operational control in this case

# The typical rationale for the enhanced requirements and restrictions of Part 135 doesn't apply.

aircraft. A copy must also be mailed "within 24 hours of its execution" to the FAA Registry in Oklahoma City. Further, at least 48 hours prior to the first flight under the lease, the nearest FSDO must be notified in person or by telephone. (The Advisory Circular says this may also be accomplished by email within the FSDO's discretion, though if you have to call to ask if it's OK to use email, you might just as well notify the FSDO at that time.) This may give the impression that leases are under eagle-eyed surveillance by the FAA, but as far as I know, the FSDOs ignore the notices and the Registry ignores

is apparently perfectly acceptable. The same is true even if the lessee has no certificate as long as the lessee pays no compensation, since the regulation defines "lease" to include only agreements to furnish an aircraft for compensation or hire.

The bottom line: instead of providing useful disclosures to prevent unscrupulous lessors from taking advantage of neophytes, as the Truth in Lending Act does, the FAA's truth-inleasing requirement looks more like a "gotcha" designed in part to allow the FAA to sanction those same neophytes if the lease is written incorrectly. Truth in regulating, anyone?

**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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# 900DX

by Mark Huber

lmost 30 years after it first entered service, the Dassault Falcon 900 series remains in a class by itself; from its three-engine layout to its advanced computer design to its construction using lightweight alloys and composites, it is truly peerless.

Over the years via multiple variants, Dassault has made many improvements to the aircraft's range, avionics, and engine power, but the guts of the airplane and its value proposition remain largely unchanged: the trijet design lets you go where twinjets cannot and the lightweight construction means you often burn less fuel while doing so.

With the 900, you travel in comfort and you travel in style. Ample natural lighting enters the cabin through 24 windows and the fuselage is pressurized to maintain a sea-level cabin through 25,000 feet, beating back jet lag. My only criticisms of the cabin concern the smallish size of those windows and the height of the seat bases, which are a little short for tall folks.

A typical cabin layout features passenger seating for 11 to 14. The standup 74-inch-tall, flat-floor cabin yields 1,264 cubic feet of space and is 92 inches wide from the centerline. The optional forward crew lavatory cuts down on galley space but is a must-have for longer missions. The galley offers hot and cold running water, a convection/microwave oven, an ice drawer, and stowage and can be outfitted with all manner of custom coffee/espresso makers. Eliminating a forward closet can clear the way for an optional third crew seat.

Typical cabin layouts include a forward club-four grouping followed by four smaller seats arrayed around a hi-lo conference table opposite a credenza. Behind that is room for more single seats or a pair of three-place divans. You can close off this aft part of the cabin with a solid pocket door, creating a private suite. Behind this space you'll find the generously sized aft lavatory with another small wardrobe closet and in-flight, walk-through access to the heated 127-cubic-foot baggage compartment, which can double as a makeshift dressing room. The external baggage door incorporates a step for easy loading.

## USED AIRCRAFT REVIEW



In 2005, Dassault began delivery of the \$31.95 million Falcon 900DX, which has a 4,100-nautical-mile-range (eight passengers with IFR reserves). The airframer designed the DX to replace the Falcon 900C in its lineup and to fill the market niche between its twinjet Falcon 2000EX and its \$34.95 million, 4,500-nautical-mile range Falcon 900EX trijet. The DX features the same improved Honeywell TFE731-60 turbofans (5,000 pounds of thrust each) and advanced EASy avionics that are on the more expensive EX but does not have the EX's centerline fuel tanks for extra range. Even so, the DX is capable of missions such as Geneva to Detroit; New York to Athens, Greece; and Caracas, Venezuela to Paris.

Thanks to the improved Dash 60 engines, moreover, the DX is demonstrably more fuel-efficient than the 900C and has lower operating costs. It also has a quieter cabin and outperforms the 900C in almost every parameter: time to climb to 39,000 feet is 18 minutes in the DX versus 23 in the C, for example, and balanced field length is 4,890 feet in the DX versus 4,935 in the C. The DX also offers better high-and-hot performance: with takeoff from Aspen, Colorado on a 77 degree F day, the range in a DX is 3,560 nautical miles versus 2,785 in a C. Besides the new engines and avionics, the DX features a variety of system





upgrades, including a new cabin-pressurization system, brake-by-wire, and new fuel-metering and oxygen systems.

A 10-year-old DX in good condition sells for about \$13 million, just slightly more than the \$12.5 million you'd typically pay for the same year's Gulfstream G450, according to the online aircraft valuation service Vref. However, the DX costs fully \$4 million less than the market value of the same vintage 900EX, whose 400 nautical miles of additional range come with a significant price premium. By way of perspective, a new Falcon 900LX, with a range of 4,750 nautical miles, retails for \$43.8 million.

Because of its newer engines and avionics, the DX is a great value. However, if the EASy avionics have not been upgraded to the EASy

#### Specifications & Performance

'				
Passengers (executive)	12			
Pilots	2			
Range*	4,100 nm			
Max Cruise Speed	482 kt			
	Height: 6.2 ft			
Cabin Dimensions	Width: 7.7 ft			
	Length: 33.2 ft			

\*IFR NBAA 200 nm reserves.

#### **Economics**

Total variable flight cost/hour	\$3,772.18		
Total fixed cost/year	\$789,000		

Source: Conklin & DeDecker, Orleans, Mass.

Please see the online version of this article for detailed specifications and performance data as well as a report on all hourly and annual fixed and variable expenses.

The DX is more fuel-efficient than the 900C and has lower operating costs. It also outperforms the 900C in almost every parameter.

#### Falcon 900DX compared with other aircraft

Model	First year produced	Variable cost/hour	Seats exec/max	Range (nm)	Normal cruise (kt)	Max takeoff weight (lb)	
Falcon 900DX	2005	\$3,772	12/19	4,050	459	46,700	
Challenger 604	1996	\$3,284	10/19	4,033	459	48,200	
Gulfstream G450	2005	\$3,917	14/19	4,363	476	74,600	

Assumptions: Aircraft are 2006 models. Jet fuel \$3.99/gal; variable cost: fuel plus maintenance reserves; four passengers; NBAA IFR 200 nm reserve fuel; passenger weight 200 lb includes baggage; two pilots. Sources: Conklin & de Decker's Life Cycle Cost and Aircraft Performance Comparator.





Ask any Falcon pilot: Aviation Partners® High-Mach Blended Winglets™ boost performance instantly on all Falcon 900, 2000 and 50 series aircraft. Retrofit now. You'll climb faster, cruise higher, and fly farther than ever before. Call +I (206) 762-II7I or fly to aviationpartners.com.

#### USED AIRCRAFT REVIEW

II system, you'll need to do that to comply with the latest FAA digital air-traffic-control mandates. The job can easily cost up to \$1.3 million and will require pilot training at CAE or Flight-Safety International.

The full EASy II system includes features such as controller-pilot datalink communications (which allows air-traffic controllers and pilots to easily exchange written messages, clearances, and data, thereby reducing mistakes and misunderstandings), Honeywell's SmartRunway runway awareness advisory system (which depicts and warns of threats), and a takeoff-and-go-around mode to reduce pilot workload.

ptional features include the SmartView synthetic vision system with head-up display symbology; and dual Jeppesen navigational and procedure charts and XM graphical weather, which significantly improve pilot situational awareness. And, in the case of cabin-pressurization-system failure, the autopilot engages an automatic descent mode that takes the aircraft to a safe altitude. EASy II enables precision wide area augmentation system/localizer performance with vertical guidance approaches down to 200-foot-ceiling minimums; and the ADS-B OUT feature, which gives air-traffic control the ability to provide your pilots with more direct routing and continuous descents, saving you time and fuel.

The comprehensive "C-Check" inspection is a good time to do an EASy II upgrade or any other major modification to your DX, such as

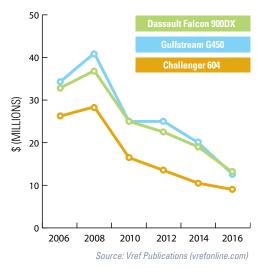


revamping the interior or adding winglets. Popular interior upgrades include LED cabin lighting, acoustic sound-dampening blankets, and Wi-Fi. New single executive seats, available for retrofit, can be reclined to lie flat, in full-berthing positions. Blended winglets from Aviation Partners cost approximately \$750,000 and take four weeks to install, but increase range up to 5 percent at high-speed cruise and 7 percent at longrange cruise speeds. They also enable a faster climb to cruise altitude so you burn less fuel in the process.

Remember, a 900 must undergo a C-Check every six years or 3,750 flight cycles (one takeoff or one landing constitutes a cycle), whichever comes first. The average C-Check lasts 20 to 32 days and runs anywhere from \$300,000 to \$500,000, depending on what needs to be repaired.

The good news is that Dassault's product support continues its upward trajectory,

# FAIR MARKET VALUE price comparison of competitive aircraft



as measured by an annual survey in our sister publication *Aviation International News*. Last year, the manufacturer ranked second for product support, tied with Embraer, and its technical representatives and authorized service centers ranked best in the industry. The airframer also scored high in parts availability, seemingly confirming the company's claim of a 98.5 percent parts-availability rate.

The 900DX is a great airplane, and now it has the product support to match. If you need a large-cabin jet with real transatlantic range, and with the ability to get in and out of tight spots, put this one at the top of your list of candidates.

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







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# The BEST—and WORST—buys in business jets

by James Wynbrandt

ref, the transactional-market tracking service, recently created a pair of best-buy lists that underscore the hit business jet valuations have taken since 2008.

The lists, which appear in Vref's quarterly *Market Leader* newsletter, rank 47 aircraft models, manufactured in 2008 and 2012, by the percentage of value they've lost since they were new: the greater the depreciation, the better the buy. (Conversely, of course, if you already own one of these models, the higher it is on the list, the more you've lost.)

The survey includes helicopters as well as turbine, turboprop, and piston airplanes, but business jets led the pack by far in loss of value. They took the top 12 places for 2008 aircraft and the

top nine among 2012 models.

The Learjet 60XR headed the list of 2008 losers, shedding 74 percent of its value; the G200 came in second, losing 69 percent (see table). Among 2012 models, the G200\* lost the most, dropping 61 percent; the 60XR came in a close second, also with a decline of 61 percent. Talk of the resiliency of the large-cabin jet market notwithstanding, moreover, Gulfstream's G450 and Bombardier's Global XRS made the Top 10 of both lists.

If you bought an Embraer Phenom 100 in 2008 or 2012, you have less reason to scowl. The jet with the best value retention from both of those years, it lost only 29 percent since 2008 and 31 percent



since 2012. (Thus, a 2008 Phenom 100 retains about as much of its value as one that's only half its age, though Embraer was able to invest in improvements and boost the jet's list price during this period, a reflection of strong demand.)

In all, only two of the business jets ranked by Vref escaped the lists

Winners and Losers

\$13.7M

\$22.8M

\$13.7M

\$23.3M \$9.0M

\$1.7M \$1.2M

\$4.1M \$2.9M

\*Manufactured 2011, listed by Vref with 2012 models. Source: Vref

NOW

\$3.6M

\$7.0M

DECLINE

74%

69%

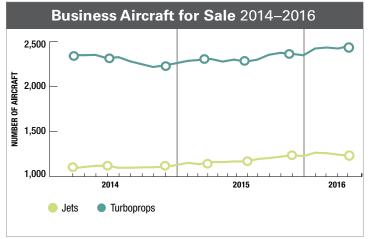
61%

61%

of the Top 20 value losers from '08 and '12—the Phenom cited above and the CitationJet 2+. Meanwhile, only six non-jets placed in the Top 20 for depreciation (four Beechcraft King Air models, a Piper Meridian, and an Airbus EC130B4 helicopter). Otherwise, the "best" jets in terms of value retention were the 2008 G550, with a 44 percent decline; and the 2012 Falcon 2000LX, which lost 35 percent.

Will the pace of value loss decelerate anytime soon? "As long as we have low interest rates and low fuel prices, and the economy is plugging along at 2 percent [annual growth rate], I don't think things are going to change much in the jet market," says Iowa-based Vref's new publisher, Rick Cox.

James Wynbrandt (jwynbrandt@ bjtonline.com) is a private pilot and longtime BJT contributor.



Source: JetNet LLC (JetNet.com)

#### **SOME POPULAR PREOWNED MODELS 2013–2014**

Leariet 60XR

Gulfstream G200

Gulfstream G200\*

Embraer Phenom 100

Embraer Phenom 100

Learjet 60XR

2012—Models Biggest Declin

2008—Models Smallest Decline

2012—Models Smallest Declin

	BOMBARDIER CHALLENGER 605	CESSNA CITATION SOVEREIGN	EMBRAER LEGACY 600	DASSAULT FALCON 2000LX	GULFSTREAM G200	GULFSTREAM G450	BOMBARDIER GLOBAL XRS	HAWKER 850	LEARJET 60XR	EMBRAER PHENOM 100
No. in Operation	286	348	174	131	246	335	160	99	113	331
No. for Sale	29	27	30	13	41	31	20	12	11	39
Avg. Price 2014 (millions)	\$16.2	\$8.5	\$10.6	\$22.5	\$9.5	\$23.9	\$32.0	\$6.5	\$6.1	\$2.9
Avg. Price 2015 (millions)	\$15.6	\$8.3	\$9.3	\$19.4	\$6.0	\$21.9	\$26.3	\$4.5	\$5.0	\$2.8
Avg. Price 2016 (millions)	\$13.3	\$7.5	\$8.3	\$18.1	\$5.5	\$17.6	\$24.1	\$4.3	\$4.4	\$2.8
Note: Prices are as of May in each year. Source: JetNet LLC (JetNet.com)										



**BOB PITTMAN**CEO, iHeartMedia

"Business aviation optimizes iHeartMedia employees' ability to meet in person."



# Capin Five Travelers' Favorite Gear by James Careless

When you spend lots of time in business jets, you inevitably come to treasure certain technological solutions that make the airborne life more pleasant and productive. We asked five frequent fliers to tell us about their favorite on-board gear.

#### Making Smartphones Even Smarter

In 1984, at the tender age of 17, Les Goldberg started the video-equipment-rental firm LMG. Since then, the company has grown to become a major provider of video, audio, and lighting supplies to the U.S. entertainment industry. Goldberg is LMG's CEO and the proud owner of a new Embraer Legacy 450 business jet. "I chose the Legacy 450 because it is a modern, reliable fly-by-wire aircraft with high-quality fit and finish and the newest technology," he says.

Goldberg's favorite cabin-tech product is Gogo Text & Talk. It is an add-on to the \$10,000 Gogo Biz on-board equipment. Gogo Talk & Text allows the CEO to directly make and receive calls with his smartphone over Wi-Fi using the Legacy 450's communications system—just as if he were calling on the ground. Gogo Biz is a



Les Goldberg likes that his smartphone works at 40,000 feet.

broadband and voice service covering the U.S. and populated areas of Canada that is provisioned by one of Gogo's four on-board hardware units. Each such unit supports full internet connectivity to in-cabin devices over Wi-Fi. Gogo Text & Talk uses a downloadable app to connect smartphones seamlessly to the Gogo Biz unit.

"When I am at 40,000 feet, people can call my smartphone, and it rings," says Goldberg, "I am totally into the fact that my customers can call me anytime. Meanwhile, being constantly connected to my business while flying is very cool. I don't miss a thing."

#### The Sweet Sound of Quiet

As CEO of Cambryn Biologics and Aviation Partners of America, Mark Famiglio spends about 150 hours a year flying for business in a Gulfstream G200 jet. In a bid to arrive as relaxed as possible, he creates a quiet zone for himself by wearing a Parrot Zik noise-cancelling wireless headset. It uses four built-in microphones and associated circuitry to capture, analyze, and cancel background noise.

"The Parrot headset is beautifully designed, with touch-sensitive controls," says Famiglio. "It also connects to my telephone via Bluetooth."

By wearing the headset in flight, Famiglio is able to enjoy his favorite music wirelessly while staying available to his phone, all while blocking out cabin noise. "I have grown accustomed to the Parrot's great specifications and receive many comments on its handsome design," he says. "I arrive much more rested and ready to do battle



Mark Famiglia stays connected while tuning out cabin noise with this Parrot headset.

when I land in a distant town to do business. Also, I return home with energy to focus on my wife and young children."

The new Parrot Zik 2.0 comes with an Android/Apple app that allows users to manually tune the frequency response via a five-band parametric equalizer with reverb and virtual speaker spacing. Custom equalizer presets tailored for specific types of music have been created for the Parrot Zik 2.0 by artists DJ Jazzy Jeff, Andrew Watt, and La Roux, among others.

#### Airborne Internet Is a Game Changer

With its instruments being played by the likes of Taylor Swift, Jason Mraz, and Dave Matthews, Taylor Guitars has grown to become one of the top names in its field. [See April/May 2016 BJT cover story.—Ed.] As a result, director of sales Monte Montefusco spends lots of time in the company's Gulfstream G450, as he wings around the world meeting with customers. "I fly



Monte Montefusco accesses his company's data server in San Diego while flying around the world.

several weeks a year, mostly for Taylor Guitars' international business," he says.

His favorite cabin technology? It's the Gulfstream satellite communication system (known as Broadband Multilink) and on-board Wi-Fi, Montefusco says, adding that "having worldwide reliable internet service has given Taylor Guitars a distinct competitive advantage."

Being able to access the company's data server in San Diego while flying around the world "allows us to thoughtfully discuss important business plans," notes Montefusco. "Being able to leverage uninterrupted communication in the air has been a game changer for us."

Gulfstream's Broadband Multilink (BBML) uses an aircraft's satellite connectivity to send and receive emails, download attachments, and connect to the internet. BBML can support multiple passengers, using Wi-Fi-connected computers, tablets, and smartphones. To maximize connection speeds, BBML first searches for Ku-band satellite channels that offer higher data rates (available only over North America, the North Atlantic, Western Europe, the North Pacific, and parts of Africa and South America). If these aren't detected, BBML connects to slower, globally available L-band satellite services.

#### Monitoring Sleep and Making Movies

Adam Twidell founded the UK-based charter broker PrivateFly in 2008 after a career in the Royal Air Force and then as a private jet pilot.

When he flies, he takes along a variety of tech toys, starting with the Fitbit, a wrist-worn device



that helps him track his physical activity. "When you travel a lot, you need to make sure you keep moving as much as you can," Twidell says. "This helps me monitor my sleep pattern when I'm flying long haul, and motivates me to find fitness time around my business schedule."

Twidell also travels with a GoPro Hero 4 digital camera. This is the small, rugged camera often worn by athletes to capture their antics from their point of view, in 1080p HD video or 12-megapixel still photos. "As a keen photographer and AV geek, I love capturing amazing landings and other video content for business," Twidell says.

He additionally packs a Squid Power Bank rechargeable power supply. "I always carry my Squid," he says. "With 10400 mAh, it has kept



me doing some vital business on the move." Finally, he uses Bose QuietComfort 25 noise-cancelling over-the-ear headsets to block out background noise when he is aloft.

#### Lighting Sets the Mood

Mark Bonfigli leads a busy life. He and his wife Marisa Mora Bonfigli compete on the International Tennis Federation's Beach Tennis circuit, which takes the pair all over the world in their Gulfstream V, which they've branded SEXYjet. Its eye-catching exterior paint job, which draws from Bonfilgi's work in the automotive industry, required more than 3,000 hours of labor from Duncan Aviation.

Bonfigli's favorite on-board technology is Gulfstream's LED mood-lighting system. "While it offers all the colors of the rainbow, my favorite is red," he says. "This mood lighting comes from massage studies, where light therapy feels very relaxing.

"The interior looks sporty," Bonfigli adds, "but it has the comfort of a Bentley—a big touring car that you fall asleep in. You can't help but feel good when you step onto the SEXYjet in the evening and there are glowing red lights, cream leather seating, and our theme song, Phil Collins's 'In the Air Tonight,' is playing."

James Careless (jcareless@bjtonline.com) is a freelance writer who specializes in aviation topics.



# Pay now, smile later

Hourly maintenance plans can enhance your aircraft's value while giving you peace of mind and a more predictable budget.

by Mark Huber

ourly maintenance plans for airframes, engines, and avionics have become a regular and often expected part of aircraft ownership. In exchange for a fee paid for each operating hour (and sometimes fixed fees as well), plan providers agree to cover certain or all scheduled and unscheduled maintenance, thereby bringing cost and performance surety to operations.

Some leasing companies and other aircraft financers now require these plans as a tool to protect asset value, and the market applies resale valuation penalties—sometimes into the millions of dollars—to aircraft that aren't on a plan. For example, using *Aircraft Bluebook Price Digest* data, GE Aviation claims that Bombardier Challenger 604s and 605s enrolled in its OnPoint CF34 engine-maintenance plan are worth up to \$2 million more at engine midlife.

The maintenance plans seem to be getting more flexible, covering more items and for longer durations as components become more reliable. Engine programs remain the most popular and are the easiest to quantify in terms of aircraft valuation, but parts, labor, and airframe offerings also are catching on.

Here's a look at some of the best-known programs from equipment makers and independent providers:

#### ■ GE Aviation

GE offers OnPoint coverage for CF34 engines on Bombardier Challenger 600 series, CFM56 engines on the Boeing Business Jet, and H80 turboprop engines. OnPoint focuses on engine management, aircraft availability, and off-aircraft support. The program also covers technician training and provides updates to technical publications. GE has established a global service network with 50

locations, and customers may also opt for a network provider of their choice. The program covers all aspects of engine repair and overhaul, including life-limited parts, loaner engines, transportation, line maintenance, and some labor. OnPoint is available for new and used aircraft with no buy-in, transfer, or exit fees.

GE Honda Aero Engines' Engine Maintenance Care program allows HondaJet owners to get coverage for their HF120 engines straight away via a network of authorized service providers. A comprehensive version of the program covers line maintenance inspections and repairs, scheduled and unscheduled engine-shop

visits, replacement of life-limited parts, and incorporation of alert service bulletins. A more spartan option excludes transportation, labor, and life-limited parts. Both variants are transferable.

#### Honeywell

Engine and components manufacturer Honeywell launched one of the industry's earliest hourly programs—MSP, for maintenance service plan, back in 1976. MSP is rated for its impact on aircraft appreciation in the Aircraft Bluebook Price Digest.

Honeywell has made many enhancements to the program and over the past decade has launched MSP Gold, which offers optional coverage for road-trip costs anywhere in the world when an aircraft is grounded for maintenance. It also insures against foreign-object debris (FOD) damage—ingestion of debris into the engines—and covers parts that are found during the FOD repair to need replacement because of normal wear and tear. Honeywell engines that can be covered under MSP include the series TFE, HTF, CFE, ALF, and TPE. The company's auxiliary power units can also be covered.

#### Jet Support Services Inc.

JSSI's engine-maintenance programs all allow buy-ins based on engine hours and cycle times (number of takeoffs and landings). The company also provides a deferred buy-in option. Advisors are assigned to each client to assist with procurement of service and parts. The company offers five levels of service:

▶ Platinum, designed for owners and operators of select makes and models of large-cabin aircraft, provides comprehensive coverage for engine removal, shipping, and replacement. "Coverage for scheduled repair and replacement of life-limited parts, as well as routine inspections, may also be added," according to JSSI.

- **Premium**, available for most business aircraft engines, covers scheduled and unscheduled events, as well as life-limited components. Options include coverage for removal and replacement of engines, off-site logistical support, shipping, and parts and labor for routine inspections.
- > Select covers scheduled and unscheduled maintenance, including premature failure of life-limited components. It does not, however, cover scheduled replacement of such components, and that exclusion results in lower hourly fees.
- ▶ *Unscheduled* covers all unforeseen maintenance expenses in exchange for one annual payment, with the amount based on utilization.
- Low Utilization Inspection is exclusively for owners and operators of the Embraer Phenom 100 with Pratt & Whitney Canada PW617F engines. It covers low-utilization inspections (LUIs), engine compressor washes, and corrosion.

JSSI offers optional coverage for labor associated with removal and replacement of engines in connection with a covered event; shipping charges on components and

engines; off-site AOG logistical support; labor for routine inspections; LUIs for P&WC series 300, 500, and 600 series engines; and the cost of supplemental lift when rental engines are unavailable. The company also provides "tip-to-tail" aircraft coverage programs as well as airframe-only plans.

#### ■ Pratt & Whitney Canada

P&WC provides plans for all of its engines, including the ubiquitous PT6s that power turboprops such as the Beechcraft King Air and Pilatus PC-12. The company's PT6Smart programs offer services for operators of used aircraft with PT6A engines. PT6Smart comprises four programs, from engine exchanges-tailored for imminent overhaul or low utilization—to the PT6A-114A upgrade and extended warranty. With some services, no additional charge applies for expired low-cycle fatigue parts, parts not made by P&WC, corrosion, sulphidation, or foreign-object damage.

P&WC's Eagle Service Plan offers five levels of coverage:

> Silver Lite covers scheduled and required overhauls/refurbishment, inspections, and service bulletins as well as unscheduled repairs, labor, parts (except life-limited ones), factory engine accessories, rental engines, and engine trend-monitoring analysis.

- ▶ *Silver* adds life-limited parts.
- ▶ Gold Lite adds line removal/ access labor, including the cost of a mobile repair team for unscheduled aircraft-on-ground events, engine freight, and engine accessories and parts.
- ▶ Gold covers everything in Silver and Gold Lite.
- Platinum provides more coverage for engines on the Falcon 2000 and 7X, including enhanced engine trending and performance analysis, low-utilization inspections, parts and labor for routine inspections, and corrosion repair.

#### ■ Rolls-Royce

The Rolls-Royce CorporateCare program covers its engines on the Gulfstream G650, G550, G450, G350, GV, and GIV; Bombardier's Global series; Embraer Legacy 650 and 600s; and the Cessna Citation X and X+. Like most other plans, CorporateCare is fully transferable with the aircraft, thereby increasing its residual value. The program covers scheduled and unscheduled maintenance, training for one technician, and engine trend monitoring. It keeps you flying by also covering temporary installation of a leased engine while yours is out for service.

#### ■ Williams International

Engine-maker Williams is offering an expanded version of its Total Assurance Program (TAP) for maintenance called TAP Blue. Williams engines power the full line of Cessna Citation CJs/M2s and Beechcraft Premier light jets. Under the new program, Williams will cover "virtually every natural and unnatural event" that might befall its FJ33 and FJ44 engines, including damage from lightning, hail, or ingestion of birds or FOD. Another new

#### **Plans for Turboprops**

Hourly maintenance programs are migrating downstream to smaller and smaller aircraft. An executive for single-engine turboprop maker Daher, builder of the popular TBM airplane line, has said his company will roll out a plan in 2016.

Making a case for hourly plans with first and even second owners of turboprops can sometimes be a hard sell, but these plans are ultimately worth the money, says Matt Gerus, senior marketing manager for GE Aviation's turboprop engines. "In the turboprop space, [aircraft annual] utilization is typically low, and the ownership cycle is six to seven years. The first two owners don't need to worry about [engine] overhaul—it is the third owner that is going to bump into it.

"Convincing the first guy to pay for an hourly maintenance plan is tough," Gerus adds. "An aircraft on a program is worth more in the marketplace, but you need to convince the owner of that. Remember, the first owner is paying for something he may never use. The valuation services, banks, and insurance companies also will play a role in generating greater acceptance among turboprop owners, and there are distinctive benefits from being enrolled. It gives the owner piece of mind, knowing what maintenance costs are going to be." — M.H.

coverage item is all service bulletins, not just mandatory ones. The program offers express overhauls and free online maintenance manuals.

Williams is providing incentives through the end of the year for existing customers to upgrade to TAP Blue and for new customers to sign up. TAP can be rolled into Textron Aviation's ProAdvantage maintenance programs and any Textron-owned Citation service center or any shop authorized by Williams can perform TAP-covered maintenance.

Aircraft manufacturers offer their own hourly plans, either in cooperation with engine and avionics manufacturers, or as add-ons to those companies' plans:

#### **■** Bombardier

Bombardier launched its Smart Parts hourly airframe maintenance parts program in 1986. Over the years, the program has grown, with companion offerings added, to include parts and labor on select Learjets, Challengers, and Globals; and Smart Parts can be expanded to cover cabin systems. The plan provides long-term price guarantees, additional airframe system component coverage, and labor on scheduled airframe inspections for customers who use Bombardier-owned service centers or select authorized centers.

#### ■ Dassault Falcon

Some manufacturers now allow inservice aircraft to join plans. Dassault Falcon owners, for example, can sign up for that company's FalconCare program from the first heavy maintenance check, called a "C Check," and use it at any of the airframer's authorized service centers. The program includes subscriptions to Dassault's computerized aircraft maintenance program (Camp) but does not cover engines or auxiliary

power units. If you sell your aircraft, you can transfer the program to its new owners without a fee.

FalconCare includes all labor, scheduled and unscheduled events, and service bulletins. Three guaranteed rate levels are available—per flight hour, per flight cycle, and per month.

#### ■ Embraer

Embraer is a relative newcomer to corporate aviation, but it wasted no time setting up an hourly maintenance plan for its owners, initially with the Total Legacy Care program and then in 2008 with Embraer Executive Care (EEC), which covers all of its aircraft, including the Phenom line of light jets, for five years. Today, over 400 aircraft are enrolled in EEC, the majority being Phenom 100s and 300s.

EEC complements warranties by covering unexpected costs associated with scheduled and unscheduled maintenance, rescue teams, wear and tear, and the exchange, repair, and transport of parts such as tires, brakes, and batteries. Participants in the program—who receive discounts on parts, repair management, and logistics—pay a fixed monthly fee plus a charge based on hours flown.

Embraer offers three levels of service:

- ▶ EEC Standard covers freight costs, aircraft components such as avionics and auxiliary power units, tires, and brakes for scheduled and unscheduled maintenance.
- EEC Intermediate is currently available for the Legacy 600, Legacy 650, and Lineage 1000E and covers labor and heavy maintenance plus all the options available under EEC Standard.
- ▶ EEC Enhanced provides the coverage available under EEC Standard as well as labor for maintenance and mobile recovery services to help with unexpected events at remote locations.

For Phenom engine maintenance, Embraer offers the EEC Engine Add-On option. Owners



of the company's other jets work directly with the engine manufacturers—Honeywell for the Legacy 500, Rolls-Royce for the Legacy 600/650, and GE for the Lineage 1000E.

#### Gulfstream

Gulfstream offers PlaneParts for its in-production and most of its out-of-production aircraft, including the GV, GIV, G200, and G100. During the term of an operator's warranty, PlaneParts provides replacement components for parts removed for life limit or wear in exchange for monthly payments based on the flying hours of the aircraft. After the warranty period, PlaneParts extends coverage for most items that need to be replaced due to unscheduled events or mandatory service bulletins.

Upon entry into service of the G650ER/G650, G550, G450, G280, and G150, PlaneParts offers optional coverage for some systems installed during final-phase manufacturing. These include water and waste, entertainment and in-flight information, Broad Band Multi-Link internet, Gulfstream's Enhanced Vision System II avionics, in-flight phones, and satellite television.

#### **■ Textron Aviation**

Textron is starting to fold Hawker and Beechcraft models into its long-standing Cessna plans, such as ProAdvantage, ProParts, and ProTech. The additional models covered include the Hawker 750, 800, 850, 900, and 400XP/XPR. King Airs became eligible for the program in 2015.

The plan covers airframe parts as well as engines, APUs, avionics, wheels, brakes, motors, actuators, gauges, and light bulbs. ProTech locks in labor costs during the contract period. ProAdvantage customers can also opt for ProManagement, which includes maintenance, support, and aircraft management. Textron's cooperative engine coverage plans with Pratt & Whitney Canada are known as PowerAdvantage+ and are available for such popular models as the Cessna Citations Mustang, Bravo, V, Ultra, Encore, Encore+, Excel, XLS, XLS+, Sovereign, Sovereign+, and Latitude. Textron's programs with Williams International are known as TapAdvantage Blue and cover the Citation CJ series and the Beech Premier IA.

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





## NBAA REGIONAL FORUM

September 15, 2016
White Plains, NY | Westchester County Airport (HPN)

#### ATTEND NBAA'S REGIONAL FORUM

This industry event brings together local business aircraft owners, operators and manufacturers, and other aviation professionals for a one-day event at the Westchester County Airport (HPN) in White Plains, NY. As an attendee you can visit with exhibitors, view business aircraft side-by-side on static display and take part in education sessions throughout the day.

LEARN MORE & REGISTER: www.nbaa.org/forums/ain



To help native trout thrive, Idaho is encouraging—even paying—anglers to catch as many rainbows as they can.

by Thomas R. Pero

've admired the beauty of the wild trout found by President Thomas Jefferson's Corps of Discovery since the first time I caught one while wading a sandy beach of Yellowstone Lake in the spring of 1974. The species is called "cutthroat" because of a vivid reddish-orange slash curving across each lower jaw.

When I first fished Yellowstone Lake, it was teeming with the colorful native fish. I saw tributaries erupting in splashing spawners, and pelicans, bears, and otters feasting. Years later, some misguided angler dumped predatory lake trout in the immense thermal-ringed caldera filled with an inland sea of crystal-blue water. Now the cutthroat are vanishing.

This sad fact occupied my mind on a bright day last September as I rigged up my fly rods on the porch of a rustic cabin beside the South Fork of the Snake River in Idaho's Swan Valley. Then I crossed a wooden foot bridge over small, clear Palisades Creek. I didn't know it at the time, but that creek is playing a key role in an innovative project to help the Yellowstone cutthroat here stay purebred and to keep their numbers robust.

Palisades Creek is one of four tributaries that biologists with the Idaho Department of Fish and Game are managing in order to boost the population of the vulnerable native. The biggest threat is interbreeding with more-aggressive rainbow trout, which are not native to the river but have thrived here because of excellent habitat and plenty of food. The biologists have installed a seasonal electric barrier across the gurgling stream. When the fish migrate upstream to spawn, it diverts them into a small trap. The prize cutthroats are carefully measured, weighed, and tagged, then released safely above to continue their journey to the spawning gravel. The rainbows are relocated to a nearby kids' fishing pond.

Cutthroat trout spawning peaks in June. Over



15 years, 1,386 rainbow trout and hybrids have been removed from the spawning tributaries. In addition, each summer crews from the Idaho Department of Fish and Game sweep the streams. Current from a low-voltage wand momentarily stuns the young fish. Again, cutthroats are kept, rainbows taken out. The project is working. In Palisades Creek, population sampling in 2010 revealed 58 percent age-one and older cutthroats; by 2014 they made up 91 percent.

In the South Fork of the Snake itself below Palisades dam, the population of wild trout is split about evenly: 1,900 Yellowstone cutthroat and 1,900 rainbow per mile. These are remarkable numbers—this is one of the most abundant fisheries I've ever experienced. According to regional fisheries biologist Brett High, the cutthroat population is stable. But he wants to increase their numbers to 90 percent.

"We have an obligation to save this fish," he told me. "You can catch a rainbow trout in just about every state but Florida. But there are maybe five places left where you can catch large, native cutthroats."

Thomas R. Pero (tpero@bjtonline.com) is publisher of Wild River Press and the author of two books on fly fishing.



# TRAVELER INFO

Fans of aviation history will be delighted to fly into Driggs-Reid Memorial Airport in Driggs, Idaho, a city-owned facility with all major features for private jets and a 7,300-foot runway. The Teton Aviation Center contains "Warbirds Cafe" and a museum housing a small fleet of well-maintained and still-flying Soviet-era MiG fighter jets, a World War II U.S. Navy SNJ, a T-28 Trojan, and an FJ-4 Fury. **Info:** tetonaviation.com, (800) 472-6382.

**The Lodge at Palisades Creek** in Irwin, Idaho offers private cabins, a fine restaurant, and experienced fishing guides. **Info:** tlapc.com, (866) 393-1613.

The South Fork of the Snake
River is open to fishing all year
but the best dry-fly fishing is from
June through September. Keep
in mind that this summer season
coincides with high-water releases
from Palisades dam to irrigate
downstream potato fields, which
means you need a boat or raft—or

a guide who has one. —T.R.P.

Anglers can play a constructive role in the restoration by doing something that in today's culture of catch-and-release fishing will strike some as counterintuitive: simply killing every rainbow trout they catch. There is no limit. And the Fish and Game department has tagged a random number of adult rainbows and is awarding prizes of up to \$1,000 for the return of their heads on a platter.

On the day I spoke with High, he told me one angler had just hit the jackpot. That morning High had scanned the heads of 24 rainbow trout the angler brought in. Three had the tiny wire-coded tags. The guy won \$50, \$100, and \$500, and went home with a whole lot of trout.

#### A BIT OF HISTORY

In June 1876 three expeditionary forces of U.S. Army cavalry and infantry set out from forts in the Montana, Dakota, and Wyoming territories. They aimed to rendezvous around the Powder and Bighorn rivers and to herd the last of the free-ranging Plains Indian tribes onto reservations.

When Lakota Sioux and Northern Cheyenne warriors in Montana Territory ambushed the soldiers from Wyoming, those troops retreated into the alpine mountain meadows of a place called Goose Creek. There, they spent weeks playing cards, reciting Shakespeare, shooting grizzly bears and bison, and fishing for trout. It wasn't until July 10 that they learned that five companies belonging to the Seventh Cavalry—including Lieutenant Colonel George Custer—had been wiped out on Little Bighorn River.

The trout that the encamped "Wyoming Column" were catching were native cutthroat. They caught and ate them by the thousands, even using sticks for fishing rods. One soldier later recalled his largest, a three-pounder: "He was noble, heavy, and gorgeous in his dress of silver and gold and black and red...I gave him all the line he wanted, fearing I should lose him." —*T.R.P.* 



In the Canadian province of Manitoba, approaching the world's largest land carnivore on foot turns out to be a good idea.

by Chris Allsop

'm learning that safari is about patience. This is my first morning at Churchill Wild's ► Nanuk Lodge, a former goose-hunting outpost marooned on the wide, curving edge of the Hudson Bay. It has been nearly two hours since we drove out of the perimeter fencing in search of the world's largest land carnivore—the polar bear. So far, nada.

That's not to say that we haven't repeatedly thought we saw something. There are innumerable boulders lining the shore, each roughly the size and shape of a crouching bear. As we leave tracks in the tar-black mud and splash through

river-mouths in custom-built Rhino buggies, the eyes play tricks. A white speck in the distance turns out to be-to our cries of disappointment—a gull. The landscape, a flat and featureless netherworld sandwiched between the lapping grey-green water and a rigid sawtooth perimeter of black spruce, seems to reflect my dismay.

Yesterday, from the cockpit of the Otter, the last of my four flights to reach this remote location near the 58th parallel (the nearest paved road is 137 miles away), we could see the bears from the air, idling along the mudflats, lingering

by streams. In an hour, I counted 19. Where have they gone? I wonder. But Albert "Butch" Saunders—our Cree guide, who has worked at the lodge since 1979—isn't fazed. He continues to scan the endless horizon, a suggestion that this drought can't last.

Make no mistake: the shores of the Hudson Bay are the place to find polar bears. Some twothirds of the world's roughly 26,000 such bears live in Canada. Experts reckon that the Western Hudson Bay population amounts to around 1,000 of them, roughly a polar bear per kilometre of shoreline. Moreover, the bears like

to gather in certain areas, and Cape Churchill, Manitoba, is a bear magnet. In the small pioneer town of Churchill (aka the Polar Bear Capital of the World), these animals are part of everyday life. Nolan Booth, the Churchill-born-and-bred director of operations for Churchill Wild, cheerfully describes how the town had to enclose its tip after it attracted too many bears—and how, at Halloween, local children are forbidden to dress as ghosts.

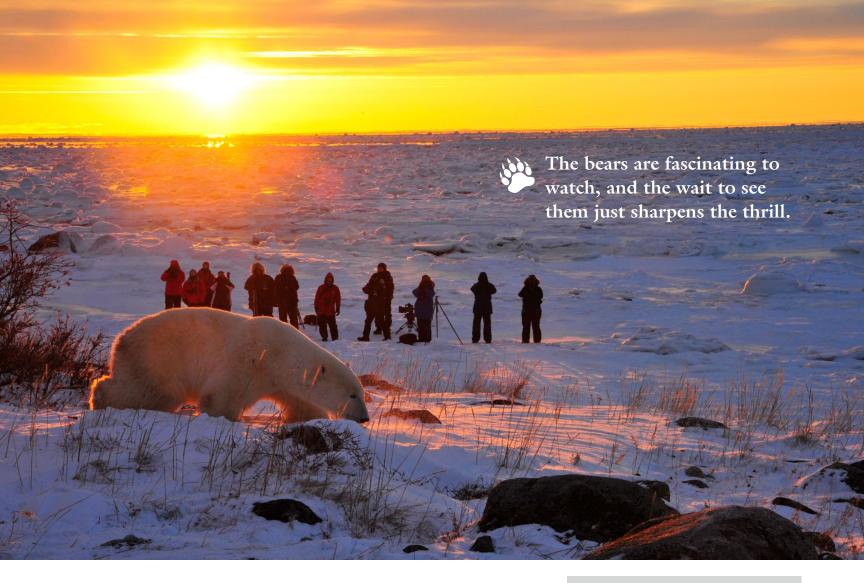
The Rhino rocks to a stop. Butch confers with curly-haired Andy, the lead guide who drives the other buggy. Binoculars are raised, breaths held. Andy has spotted a distant bear, near the surf. Forays outside of the lodge's 10-foot-high page wire perimeter fences tend to be scheduled for high tide, in order to push the bears, patrolling the water's edge for carrion, nearer to shore. The stunningly flat landscape, typical of the glaciated province, means that the four-meter tidal shift on such level terrain can expose flats that run out for up to 10 kilometers. A snowball's chance in hell comes to mind. The Rhinos begin to move again, heading for the distant breakers.

It's the roll of the ocean that keeps the polar bears tied to this strip of coast. As the temperatures rise and the sea ice begins to break apart, the bears travel south for the breeding grounds that Nanuk is situated smack in the middle of. They remain there until the bay freezes over once more, around mid-November, and it is time for them to wander north with their young, in search of seal.

This was explained to me last night, over a lavish meal of crusted caribou tenderloin, parmesan cauliflower, and citrus salad with raspberry







wine vinaigrette that eclipsed the day's breakfast of Cheerios and fruit salad. As I gorged, Andy told me the tale of Len Smith, the pioneer of the tundra buggy (a kind of pimped-out school bus on tractor tires), which transformed regional polar bear tourism from a niche concern into a booming industry.

"He made the first one in his garage in Churchill," Andy said, as a fire blazed in the lodge's cozy pine-clad dining room. "It was a means to head out onto the tundra, into areas where there are bears, and to drink and party with his buddies in safety. *National Geographic* photographers were in the area in 1979, saw Len's tundra buggy, and paid for him to take them out." The rest, as they say, is history, and Tundra Buggy One, as the original is called, is still in use.

The white bears have always enjoyed a special status among the Cree. "Elders respected them," Butch says. "If one broke into a cabin, it was chased off and not shot. Other bears would be killed."

Local hunting laws continue to reflect this special status, as you can buy a license to hunt black bears but the killing of polar bears is the exclusive preserve of the Inuits, with strict parameters. (Canada is the only nation with polar bears that continues to allow them to be hunted.) And, of course, this special status extends to the tourists' favor.

Over the few days that I'm in the area, I see bald eagles, a black wolf, the snout of a wary moose buried in the brush, and a horde of beluga whales in the Churchill estuary. At Nanuk, black bears vie for foraging rights just beyond the perimeter fence, the lodge's guests wielding their bullhorn-sized zoom lenses and clicking furiously. But when a polar bear is sighted, the excitement level skyrockets.

The bears don't disappoint. And seeing them unlocks the initially unengaging landscape. There is an appealing blend of power and fragility about the bears that's reflected in the vast Hudson Bay, from the huge storms that churn across its cinematic skyline to the delicate

#### **Traveler Report Card**

#### ACCOMMODATIONS (B+):

Considering that most of the construction materials have to be flown in on tiny planes, the lodgings are exemplary. Adirondacks line the hallways looking out over the perimeters. Large windows ensure that you won't miss any curious wildlife. The moose antler handles on the doors and antique-style lighting are nice touches, and hallway fireplaces keep you warm. Simple but comfortable.

#### CUISINE (A):

Many of the recipes at the lodge feature wild, locally harvested game and fish as well as berries foraged from the tundra. Expect dishes like maple-marinated fish for breakfast, curried squash soup for lunch, and crusted caribou tenderloin with mushroom and red wine reduction for dinner. There are numerous courses and there's plenty to go around.

#### ACTIVITIES (A+):

Viewing polar bears in the wild is an extraordinary experience. It's augmented by the professionalism and friendliness of the knowledgeable guides.

grasses populating the shore. And there's real intelligence in these creatures. We observe a touching maternal protectiveness when we approach well-fed cubs and see their mother warily sniffing the air. These animals are fascinating to watch, and the wait to see them, as we drive around in the Rhinos searching, just sharpens the thrill.

All of this begins on the first morning with that first bear—the drought-breaker. Initially we think it's just another large stone, that Andy's trained eyes have failed him. But as we skirt the area, the "stone" raises that unmistakeable long-snouted profile, a brown bear head evolved to snatch seals from their breathing holes in the ice. The lone boar is huge, probably weighing nearly a ton. The safety of the raised, aluminum-clad Rhinos seems less certain now. We wait to confirm that it's one bear, rather than two piled on each other, before, hearts thumping, we change our hiking boots for rubber ones and crunch down onto the wet sand. Out at sea, a huge storm drags dark curtains of rain across the bay's surface.

Butch says that two more bears are approaching from the north. Be careful what you wish for, I think. But I'm the only member of the group who seems concerned that the bears might outflank us. They are "ambush hunters," after all, capable of sprinting 25 miles an hour. We walk slowly towards the animal in a zigzag fashion, playing follow-the-leader with Andy, minimizing our silhouette so as not to challenge the

quarry. Our guides are armed with an array of options in the event of an attack: noisy blanks, bear-grade pepper spray, and, as a last resort, the 12-gauge shotgun.

I recall Nolan's words from the previous night: "Are they dangerous? Absolutely. But polar bears don't see us as prey. Everything is calculated; they don't want to get hurt. We don't smell like seals. But they are curious. Approaching in a big group, like we do, is an important factor. But every bear is different. You can't take anything for granted with them."

A chill wind whips up, shivering the amethyst grasses populating the dwindling noman's land between us and the animal. The bear seems relaxed, but it's watching us. Our group takes 20 minutes to reach about 50 feet out, pausing a number of times while Andy reacts to the creature's sniffs and twitches. We fan out and begin snapping photos. The bear seems unfazed, a still point among the rippling green grass that it's lying in. We remain there for half an hour, revelling in this first contact.

Afterwards, on the way home, Butch suddenly stops the Rhino. He hops out and begins to collect sweet and juicy wild strawberries from among the scrub. No longer on edge, we readily jump down and join him. Sandhill cranes coast overhead. That night, the Northern Lights waver across a pristine sky. And the beauty of this vast godforsaken place on the edge of the world continues to unfold piece by glorious little piece.





Black wolves are among the wildlife in the Hudson Bay area.

#### Fast Facts

#### WHAT IT IS:

A polar-bear safari in northeastern Canada's Hudson Bay area. You stay at a remote lodge and travel in custom-built buggies to locate bears in the wilderness before approaching them on foot.

#### **SAFARI ORGANIZERS:**

The author's six-night adventure, including housing and meals at Nanuk Polar Bear Lodge and flights from Winnipeg, is available from Churchill Wild (churchillwild.com) for \$7,300. Other companies offering similar safaris in the area include Churchill Northern Studies Center (churchillscience.ca), Frontiers North Adventures (frontiersnorth.com), Great White Bear Tours (greatwhitebeartours.com), Lazy Bear Expeditions (lazybearlodge.com), and the Great Canadian Travel Company (greatcanadiantravel.com).

#### CLIMATE:

The weather is highly unpredictable along the shores of the Hudson Bay. Expect highs of 77° F (25° C) in July with lows of around 52° F (11° C). By September the highs drop to  $66^{\circ}$  F (19° C), and, by November, to  $30^{\circ}$  F (-1° C).

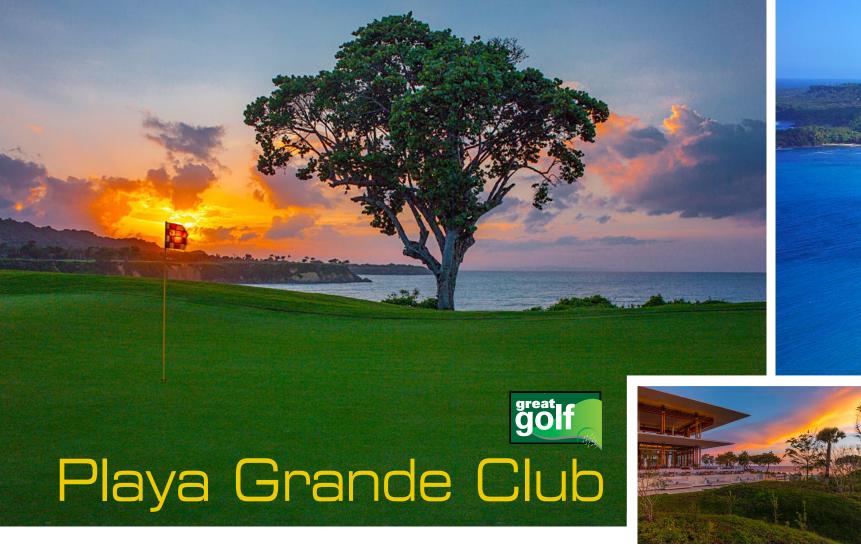
#### **GETTING THERE:**

Private jets can fly into Churchill airport, but be aware that its capacity is limited. Onward travel to lodges can mean rough, sandy runways better suited to smaller taildraggers with large wheels. (Churchill Wild charters an Otter bushplane for its transfers from Churchill Airport.)

#### WHAT TO KNOW BEFORE YOU GO:

The main polar bear viewing periods in Manitoba are July/August and October/November. Booking between September and December in the previous year will ensure that you get the best deal. October is the best time to come, when it's a little colder and the bears are more active.

Chris Allsop (callsop@bjtonline.com), a regular BJT contributor, has written on travel for the Guardian, the Sunday Times [of London], Travel Magazine, and Yahoo!. Churchill Wild and Travel Manitoba covered his expenses for this article.



# A makeover of this coastal Dominican Republic course has produced stunning results.

by Bradley S. Klein

t's the ultimate Mulligan in golf, and this time, well within the rules. Playa Grande Club, in Rio San Juan on the northeast coast of the Dominican Republic, has just emerged from a total makeover and the effect is stunning.

Rees Jones took the course that his father, Robert Trent Jones Sr., designed 20 years ago and turned it virtually upside down, or at least rerouted it closer to the shoreline, with more dramatic and more strategic lines of play along 2.7 miles of rocky bluffs overlooking the Atlantic Ocean. Greens got enlarged, and the entire place got new bunkering, an expanded range, and extensive tree work.

The par-72 layout stretches from 5,230 yards up to 7,259 and sports 10 holes on the water's edge. None are more spectacular than the finishing stretch, a par 3-4-5 combination that ranks Playa Grande right up

there with Pebble Beach for drama.

During the golf-course renovation, the development firm that had taken over the 2,170-acre property in 2007 completely transformed it. Plans call for 39 privately owned residences on the perimeter of the course. The upscale, global hotel network, Aman, was brought in to create Amanera, one of the world's cushiest, most indulgent resorts. Avid followers of the stylized brand—self-named "Aman Junkies"—will be flocking here to sample its 29 casitas and a main building whose design makes it look as if it's hovering over the beach.

The course at Playa Grande is open to resort guests and to members of the private golf club. Together, the resort and course create a powerful sensory impact. Infinity-edge pools are impressive. But infinity-edge fairways make this a golf property that sparkles by the sea.



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



## TRAVELER CALENDAR

#### August 5-21

#### **OLYMPIC GAMES**

Rio de Janeiro. More than 10,500 athletes from over 200 teams across the world will compete in 28 sports at the Games of the XXXI Olympiad. Info: olympic.org

#### August 13-14

#### **CORINTHIAN CLASSIC YACHT REGATTA**

Marblehead, Massachusetts. The race will "offer fantastic reaches and limit beats." Info: corinthianclassic.org

#### August 19

#### THE QUAIL, A MOTORSPORTS GATHERING

Carmel, California. This car show will feature approximately 200 automobiles at the Quail Lodge & Golf Club. Tickets are limited to avoid crowds. Info: peninsula.com

#### August 21

#### PEBBLE BEACH CONCOURS

Automobiles and motorcycles are judged for historical accuracy, technical merit, and style. Info: pebblebeachconcours.net

#### August 25-28

#### THE BARCLAYS GOLF TOURNAMENT

Old Bethpage, New York. The competition will be played on the Black Course at Bethpage State Park, one of the last courses designed by renowned architect A.W. Tillinghast. Info: barclaysgolf.com

#### August 28

#### **GULFSTREAM PACIFIC COAST OPEN FINAL**

Santa Barbara Polo Club, Santa Barbara, California. Arrive in your best Sunday polo attire. Info: nightout.com

#### August 28-September 4

#### THE HAMPTON CLASSIC

Bridgehampton, New York. This prestigious horse show incorporates on-site luxury shopping, activities for kids, and more. Info: hamptonclassic.com

#### August 28-September 5

#### **BURNING MAN**

Black Rock Desert, Nevada. What started in 1986 in San Francisco with a few friends and an effigy/bonfire of "self-expression" has evolved into a large week-long annual event. Info: burningman.org

#### August 28-September 11

#### **EAST COAST OPEN**

Greenwich Polo Club, Greenwich, Connecticut. Enjoy gourmet food and a cold beverage (or two) while watching some of the world's best polo players compete.

Info: greenwichpoloclub.com

#### August 29-September 11

#### **U.S. OPEN TENNIS TOURNAMENT**

Flushing Meadows, Queens, New York. The final tennis major of the year, played at Arthur Ashe Stadium.

Info: usopen.org

#### August 31-September 10

#### **VENICE INTERNATIONAL FILM FESTIVAL**

Venice, Italy. The oldest film festival in the world celebrates its 73rd year.

Info: labiennale.org

#### September 2-5

#### **TELLURIDE FILM FESTIVAL**

Telluride, Colorado. Check out new films that may go on to win Oscars. Info: telluridefilmfestival.org

#### September 8-10

#### **JET EXPO**

Moscow, Russia. The 10th consecutive year of the biggest airshow in the region. Info: jetexpo.ru

#### **GOLD STANDARD**

Chapter 5 of the official Olympic Charter states, "The practice of sport is a human right." It is in this spirit that the Paralympic Games—a major, multinational, multi-sport event involving athletes with a range of physical disabilitiescontinues to thrive.

Its origins can be traced back to 1948, when a doctor named Sir Ludwig Guttmann created an event called the International Wheel-



A member of the U.S. wheelchair rugby team during the 2012 **Paralympic Games** in London.

chair Games for veterans coming out of World War II with spinal-cord injuries. In 2001, the International Olympic Committee and the International Paralympic Committee signed an agreement guaranteeing that host cities would be contracted to manage both the Olympic and Paralympic Games.

Today, the Paralympic Games are rec-

ognized as one of the world's most prestigious sporting events. This year they will be held in Rio de Janeiro September 7-18, a few weeks after the Summer Olympics.

**Info:** paralympic.org and rio2016.com

—Jennifer Leach English



#### Sentember 8-15

#### **NEW YORK FASHION SHOWS**

New York City, Independent and branded fashion shows and champagne-soaked events sprout up all over Manhattan to celebrate the international clothing collections for next spring.

Info: fashionweekonline.com

#### Sentember 15

#### **BUSINESS AVIATION REGIONAL FORUM**

Westchester County Airport, White Plains, New York. Networking and educational seminars for bizavindustry insiders and customers. Info: nbaa.org

#### September 16-20

#### **LONDON FASHION WEEK**

London. This semiannual trade show is one of the "Big Four" fashion weeks, along with events in New York; Milan, Italy; and Paris. Info: londonfashionweek.co.uk

#### September 20

#### **NYC BALLET FALL GALA**

New York. Post-performance, conclude the evening with a stylish supper ball where guests dance late into the night with ballet-company members, fashion designers, and celebrities. Info: nycballet.com

#### September 28-October 1

#### **MONACO YACHT SHOW**

Port Hercules, Monaco. Arguably the most prestigious boating show in the world, the event offers four days of cocktail parties, conferences, and fun.

Info: monacoyachtshow.com

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

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# Two paths to the cockpit

Are you safer flying with military- or civilian-trained pilots? You could make a case for both, but you should be fine either way.

by Mark Phelps

rom your vantage point in the cabin, do you feel most comfortable with a military-trained crew at the helm? Or does it make little difference to you where the front-seat occupants of your business jet cut their aeronautical teeth? It's one of the long-standing debates in business aviation: Does military training and experience make a candidate more qualified for a civilian flying job?

Some argue that the military's full-time pace of training and sophisticated aircraft make this question a no-brainer. The steely nerves required for combat flying are just the ticket for handling any potential emergency, they add. So, pick the guys or gals with the silver (Air Force) or gold (Navy) wings on their chests.

The flip side of the argument questions whether military pilots might have it too easy in some critical areas. They're backed by a massive support infrastructure that assumes responsibility for flight planning, performance calculations, weight-and-balance stipulations, and fuel requirements.

It's not as if military pilots never learn how to handle all of that. They do. But the argument is that these skills likely atrophy over time from lack of use. Of course, you could say much the same thing about airline pilots. But, as a rule, crews flying business jets have to be far more self-reliant. They're responsible for flight plans and schedules that can flip on a moment's notice.

There was a time when you had little choice but to opt for pilots with military background, because the vast majority of career pilots got their start in Uncle Sam's uniform. During World War II, the U.S. Army Air Forces (it didn't become the Air Force until 1947) graduated 200,000 pilots, and the Navy also churned out aviators at assembly-line rates. This created an ample



supply of flyboys after the shooting stopped.

(As sexist as it was, they were virtually all "boys." Civilian cockpits didn't welcome the Women's Airforce Service Pilots—the WASPs—after the war, even though they had ferried high-performance combat aircraft all around the world. In fact, it has been only within the past year that their sacrifices have been recognized and rules changed to allow WASPs to be buried in Arlington National Cemetery.)

Of course, all pilots from "the Big One" retired decades ago. Most Vietnam-era military pilots flew helicopters, so for a long time, it was virtually impossible to land a rotary-wing job if you weren't ex-military. But now, most of those pilots are also retired. And though the Air Force is now facing a fighter-pilot shortage, the number of ex-military pilots entering business avaition is much smaller than it was some decades ago.

So moving forward, civilian flight schools will be the main suppliers of pilots. These range from mom-and-pop operations to large specialty training organizations such as Flight-Safety International. Colleges that specialize in aviation programs such as Embry-Riddle Aeronautical University, Perdue, and the University of North Dakota are also major feeders for the employment pipeline.

One common factor among those—civilian and military—who have made the sacrifices necessary to become professional pilots is a love of flying and a dedication to doing so as safely as possible. The risks involved are obvious, whether people are shooting at you or not. Pilots learn early in their careers that their skill and focus on minimizing every possible risk is what places them at the head of the class.

As the old saying goes, "Superior pilots use superior judgment to avoid all situations requiring their superior skill."

Mark Phelps (mphelps@bjtonline.com), a private pilot, is a longtime BJT contributor and a managing editor at our sister publication, Aviation International News.





"Excellence is to do a common thing in an uncommon way."
—Booker T. Washington

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\*At the typical initial cruise altitude of 41,000 ft

