BUSINESS AVIATION

THE OFFICIAL MAGAZINE OF NBAA

SEPTEMBER/OCTOBER 2015

NBAA

MANAGEMENT ISSUE

BECOME A PARTNER With Company Headquarters **PG 16**

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BREAKING BARRIERS

PG 20 Team Approach to Safety, Service

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PRESIDENT'S PERSPECTIVE

Industry Says No to Privatized ATC System Funded by User Fees



ED BOLEN President and CEO

In my message, I warned that removing congressional authority over aviationpolicymaking could leave decisions about aviation taxes, access to airports and airspace and other important matters in the hands of self-interested parties. Such a situation could undermine the long-held principle that ATC must serve the needs of the entire public, including people and companies in small and midsize communities who rely on general aviation to connect to the rest of the world.

In my previous

Perspective" column,

I underscored the

continuing to have

nation's Air Traffic

Congress oversee the

Control (ATC) system.

importance of

"President's

I raised this concern because, as part of the ongoing FAA reauthorization debate, several proposals have been, and are still being discussed for the adoption of a privatized ATC system funded by user fees.

Needless to say, the enactment of such proposals could be devastating for business aviation. Without Congress to ensure that our ATC system meets the needs of everyone, the new decisionmakers could determine when and where business aircraft operators could fly, how much it would cost to do so, and what type of payment would be required.

Consequently, NBAA recently issued a "Call to Action." We asked you to use the association's Contact Congress online resource, and social media, to tell elected officials that you oppose any legislation to create a privatized ATC system funded by user fees.

The response has been significant. Thousands of business aviation supporters have contacted members of Congress, and various industry groups nationwide have written to legislators opposing such a system.

Obviously, everyone in business aviation understands what is at stake. If we were to find ourselves in an operating environment in which we do not have affordable, predictable, safe, secure and timely access to airports and airspace, business aviation's very existence would be threatened.

To date, Congress has ensured we have that access in the U.S. But in countries with

If we don't have affordable, predictable, safe, secure and timely access to airports and airspace, business aviation's existence would be threatened.

privatized ATC systems, things have not worked out well for business aviation. In some nations, commercial operators are given priority over non-commercial operators. In others, user fees have increased during economic downturns in order to balance the books. In some cases, operators pay both user fees and fuel taxes. Considering all the negatives associated with ATC system privatization, user fees and removal of congressional oversight, it's easy to understand why NBAA has always opposed these concepts.

So, we need to maintain a strong and united voice on this issue. I urge everyone to stay informed and engaged. .

BUSINESS AVIATION

PRESIDENT AND CEO Ed Bolen

SENIOR VICE PRESIDENT, COMMUNICATIONS Dan Hubbard

EDITORIAL DIRECTOR

Amy Freed Stalzer

MANAGING EDITOR Robert A. Searles bsearles@nbaa.org

ART DIRECTION, DESIGN AND PHOTOGRAPHY Erika Freber

> DESIGN AND PRODUCTION Bates Creative

> COMMUNICATIONS EDITOR Caitlin Jacobs

ADVERTISING AND SPONSORSHIP SALES Melissa Murphy

(830) 608-9888 mmurphy@idc.nbaa.org

Robert Silverstein (240) 498-9674 rsilverstein@idc.nbaa.org

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FLIGHT BAG



NEW NOISE ABATEMENT PROGRAM NBAA has updated its Noise Abatement Program, which has been in wide use since 1967, with modern aircraft-performance and ATC requirements in mind. www.nbaa.org/ quietflying



UAS COMMERCIAL EXEMPTION RESOURCE

THINKSTOCK

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CONS:

NBAA's new resource, "Petitioning for an FAA Commercial UAS Exemption," provides guidance for businesses that wish to begin operating unmanned aircraft systems (UAS) before the FAA's final rule on commercial UAS operations is published. www.nbaa.org /uas/exemption



Resources: Management

Flight department managers have many responsibilities, and NBAA offers a wide range of resources to help them succeed. For even more tools than are listed here, visit **www.nbaa. org/admin**.

NBAA COMPENSATION SURVEY – Results are now available for the 2015 survey, which provides a comprehensive review of aviation department personnel salaries and benefits to help member companies better evaluate their flight departments.

www.nbaa.org/compensation-survey

NBAA TAX, REGULATORY & RISK MANAGEMENT CONFERENCE – Immediately before NBAA2015, from Nov. 15-16, business aviation tax professionals will gather to share best practices, learn from industry experts and develop strategies for successful aircraft ownership and operating structures. www.nbaa.org/tax/insider

AIRCRAFT TRANSACTIONS GUIDE – This publication provides an introduction to the regulatory, tax, financial and transactional issues involved in an aircraft acquisition. **www.nbaa. org/aircraft-transactions-guide**

FITTING TOGETHER CONFLICTING RULES

Are you seeing the big picture when it comes to tax and regulatory issues?



For more details on how these regulations impact your aircraft transaction, see NBAA's Tax, Regulatory & Risk Management Conference agenda and register today.

FLIGHT BAG

By the Numbers: NBAA2015

From Nov.17 to 19 in Las Vegas, NBAA will host its flagship Business Aviation Convention & Exhibition (NBAA2015), which ranks fifth among the Top 250 trade shows. The show will offer:





See Your BizAv Photo Here

The 2015 Business Aviation Insider photo contest is underway, and winners will be eligible to receive gift cards and have their photos appear in our November/ December issue. Review the contest rules online and enter by the Sept. 13 deadline! www.nbaa.org/contest



SOCIAL MEDIA SPOTLIGHT In May, NBAA began **#BizAvWorks** Wednesdays to highlight ways that business aviation helps companies succeed. Take a moment this Wednesday to let everyone know that **#bizav** works for you.







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CAPITAL VIEW



SEN. JOE MANCHIN (D-WV) was sworn into the Senate on Nov. 15, 2010 to fill the seat left vacant by the late Sen. Robert C. Byrd. Before arriving in Washington, Sen. Manchin served West Virginia as a state legislator, secretary of state and governor. He has focused on working to create good-paying jobs, spur economic development, invest in public-private partnerships that help revitalize local communities, fight burdensome regulations that stunt businesses, and ensure American businesses remain competitive in a global marketplace. Throughout his public life, he has never let politics or ideology stand in the way of commonsense solutions. Instead, he believes that only by putting politics aside and working hard to bring people together can we do what is right for the nation. A longtime pilot, Manchin is co-chair of the Senate General Aviation Caucus in the 114th Congress.

Follow Sen. Manchin @Sen_JoeManchin

Senate GA Caucus Co-Chair Understands Business Aviation

Why did you want to be a leader of the GA Caucus?

As a pilot myself, I have always made it a priority to address the unique challenges faced by the general aviation sector and to foster business growth and job creation through this growing industry. West Virginia's aviation system alone supports more than 11,000 jobs in the state and contributes about \$616 million to our economy. The GA Caucus gives me an opportunity to inform my Senate colleagues about GA's crucial contributions to the nation's economy and transportation system.

"As a pilot myself, it has always been a top priority of mine to address the unique challenges facing general aviation."

Q: What prompted you to introduce a bill opposing the FAA's proposed sleep apnea regulation?

There is nothing more important than making sure our skies are safe, and I appreciate the FAA's efforts to offer the best guidance on how to do so. However, I also believe that government should work as a partner with the private sector. It's just common sense to let our pilots provide public feedback during the rulemaking process before the FAA finalizes any new guidelines. The bill we introduced would ensure that the FAA conducted an open rulemaking process before enacting potential changes to the medical certification requirements for pilots with sleep disorders.

Q: You also worked to ensure full funding of contract towers. Why was this important?

Reliable transportation is not only important to keeping Americans safe, but it is also crucial to our country's economy, jobs and way of life. In response to mandatory sequestration cuts in 2013, the FAA proposed to eliminate funding for 149 contract towers in the program, a disproportional cut that far exceeded the reductions to most areas of the agency's budget. If those cuts had been implemented, it would have closed towers and increased traffic at the remaining contract and FAA-operated towers, while hindering the safety and integrity of general aviation operations.

Q: You also were a co-sponsor, along with Sen. Inhofe, of the Pilot's Bill of Rights 2.

Yes, I cosponsored this legislation to help reduce the bureaucratic barriers that prevent pilots from flying. The Pilot's Bill of Rights 2 is a commonsense piece of legislation that includes important reforms for the general aviation community and expands the rights of our pilots and industry leaders nationwide. It would expand the thirdclass medical exemption for recreational pilots and broaden the protections provided in the original Pilot's Bill of Rights.

Q: You also have been able to influence aviation policy through your presence on the Senate Committee on Commerce, Science and Transportation.

As a member of this committee, I have a greater influence over promoting economic development, creating good-paying jobs across America, supporting trade and small businesses, investing in advanced technology and communications infrastructure, and providing much-needed transportation funding. •:

REGULATORY HOT TOPICS

NBAA Working for Sensible Emissions Policies

NBAA was quick to respond after the U.S. Environmental Protection Agency (EPA) announced earlier this year an advanced notice of proposed rulemaking (ANPRM) to consider new regulations for carbon emissions from aircraft, based on a view by agency officials that such emissions may pose a human-health concern because they contribute to global warming.

Announced in June, the ANPRM asserted the EPA's authority to regulate carbon-dioxide emissions from aircraft. In its initial response to the ANPRM, NBAA noted that aviation emissions account for a mere two percent of all transportation emissions globally, and emissions from general aviation aircraft account for only a miniscule portion of aviation emissions.

NBAA's response also reaffirmed the industry's long-held position that any aviation policymaking must be sensible and workable, and that the appropriate international governing body – the International Civil Aviation Organization (ICAO) – should handle any policy carrying global ramifications.

"We felt that some perspective was required at the international level, given that aviation is a global industry," said NBAA Chief Operating Officer Steve Brown.

EPA acknowledged this position, and the official ANPRM, published on July 1, includes language signaling the EPA's intent to take its cues on emissions policymaking from standards now under consideration by ICAO.

Brown cautioned that while the EPA's ANPRM indicates the agency's interest in considering whatever ICAO standard for aircraft emissions ultimately emerges from the organization's deliberations, all ICAO member states, including the U.S., have authority to adopt stricter national requirements, and that the EPA could still ultimately seek tougher restrictions.

"Business aviation has long led the way in promoting advances aimed at reducing the industry's environmental footprint, despite its minimal contribution to overall transportation industry emissions," added Brown. "As this process moves forward, NBAA will continue to work with governing bodies to ensure that our continued environmental progress is well understood, and that aviation emissions policies aren't simply 'one size fits all,' but instead are workable and flexible for different segments of aviation."

NBAA has been directly involved in the ICAO process to determine an acceptable global standard for business aircraft emissions, including through its role as observers to ICAO via the International Business Aviation Council (IBAC). As part of ICAO's process, NBAA and IBAC have urged the consideration of market-based mechanisms to provide incentives for emissions reduction, and of measures that are simple and workable, and which can be built around various types and sizes of operators.

NBAA has been directly involved in the ICAO process to determine an acceptable global standard for business aircraft emissions.

Beyond its work with IBAC, NBAA is also part of a coalition of other industry stakeholders regarding aircraft emissions. The association is involved with national and international working groups – representing general aviation, the airlines, manufacturers and others – that are focused on emission policies.

At this writing, NBAA intended to submit detailed formal comments on the EPA proposal, including the possibility that the agency could assess a similar standard against any aircraft produced after 2020, not just apply the new regulation to newly type-certified designs. ••

Visit NBAA's environmental resource page at www.nbaa. org/ops/environment.



INDUSTRY CHALLENGE:

The EPA has issued an advanced notice of proposed rulemaking signaling the agency's intent to consider new regulations for carbon emissions from aircraft. The International Civil Aviation Organization (ICAO) is also deliberating such standards, with adoption expected in autumn 2016.

NBAA RESPONSE:

The Association was quick to weigh in on the EPA's announcement, and remains actively involved in the ICAO process to determine the international greenhouse gas emissions.

REGIONAL REPRESENTATION

New State Tax Initiatives Benefit Business Aviation

Sales and use taxes imposed by states are an important planning consideration for business aircraft owners. But recently, some states legislatures have realized that a positive tax policy can attract aviation activity and high-paying jobs to their states.

Not surprisingly, regional business aviation groups, usually working together with NBAA and other national organizations, have rallied to both promote pro-aviation tax policies and to fight against unfair or excess taxation of general aviation, often with great success. In addition to reforming the tax codes, these efforts have mobilized regional aviation groups and brought together aviation advocates.

A case in point is Texas, where NBAA was a leader of a coalition of aviation stakeholders that were successful this past summer in working with state legislators and the Texas Comptroller of Public Accounts to get legislation passed that provides significant sales- and use-tax reforms for general aviation based in or visiting the state. Not only does the new statute provide clear guidance and objective standards in the tax code for application of sales and use tax to aircraft, but also a variety of aviation interests cooperated to move the legislation along.

David Norton, an NBAA member and partner at a Dallas law firm, helped lead the Texas tax-reform fight and was gratified by the diverse backing he received. "We received assistance from a variety of business aviation interests, including Part 91 and charter operators, individuals flying everything from large jets to Cessna I52s, and others," said Norton. "It was a real team effort."

The result was a big win for general aviation in Texas. "By enacting this important statute, the state of Texas showed that it wants to continue offering a positive business climate for aircraft transactions and the many other services and companies that support the state's robust general aviation industry," said NBAA President and CEO Ed Bolen.

In South Carolina, another coalition – including the South Carolina Aviation Association (SCAA), the Carolina Aviation Professionals Association (CAPA), NBAA and other national aviation groups – coordinated their efforts earlier this year to help ensure passage of a sales tax exemption on parts and supplies used in repairing or reconditioning aircraft. "The collaboration between NBAA, SCAA, CAPA and others resulted in a positive outcome for all general aviation interests in South Carolina," said Greg Voos, NBAA's Southeast regional representative.

A multi-year effort by NBAA and general aviation interests in New York resulted earlier this year in the passage of aviation tax reform that will bring jobs and economic development to the state by exempting general aviation aircraft from the state's sales and use tax, which can reach 8.75 percent. Surrounding states already had similar exemptions, which was hurting the industry in New York.



GWBAA REPRESENTS INDUSTRY IN NATIONAL CAPITAL REGION

Not every regional business aviation group gets to hold its annual safety event at the state-of-the-art National Transportation Safety Board Training Center, about 30 miles from Washington, DC in Ashburn, VA. But that's one of the benefits of the Greater Washington Business Aviation Association (GWBAA), which since 2005 has been representing business aviation in the District of Columbia, Maryland and Virginia.

In addition to its Safety Standdown, GWBAA hosts a "Bowling, Brats and Beverages" networking event, a winter holiday party and an annual charitable golf event that raises funds for aviation scholarships, Corporate Angel Network and the Veterans Airlift Command. GWBAA President Greg Kinsella hopes to add an inspection authorization renewal course to the group's offerings in the future.

"We want to take GWBAA to the next level," said Kinsella, who attended NBAA's Regional Leadership Roundtable in Minneapolis in May and came back full of ideas. His priorities include increasing membership, collaborating with other aviation associations and focusing more on airport issues. In the past, GWBAA successfully fought a tax proposal in the city of Manassas, VA, and later in Virginia's Loudoun County, and Kinsella wants to build on that success.

With easy access to federal regulatory agencies, Congress and national aviation groups such as NBAA, GWBAA is ideally situated to grow its mission to represent business aviation in the Greater Washington area.

www.gwbaa.com

"By enacting this important statute, the state of Texas showed that it wants to continue offering a positive business climate for ... the state's robust general aviation industry."

> **ED BOLEN**, President and CEO, NBAA

"This was a team effort involving NBAA and many of its New York members and the New York Aviation Management Association," said Dean Saucier, NBAA Northeast regional representative. "Many members of the Long Island Business Aviation Association and Westchester Aviation Association also attended advocacy days and contacted their legislators."

Across the nation, state tax initiatives continue to serve as a focal point, fostering cooperation among business aviation groups and other aviation advocates. .

Learn more about state tax initiatives at www.nbaa.org/taxes/state.





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A simple fatigue-management program can help mitigate the risks of flight department personnel working when they are not physically up to the task.

Business aviation is a 24/7 industry that often requires physically demanding schedules. It can be difficult for pilots to look at a proposed mission and report they are not physically or psychologically fit to complete the flight, but allowing – or even encouraging – pilots to fly when they are unfit can have severe and even fatal consequences.

What processes and procedures can a flight department implement to encourage safe determination of physical fitness? Fatigue is a critical aspect of fitness, and even a simple fatigue-management program can help mitigate the risks of flying tired.

Leigh White, president of Alertness Solutions, explained there are two main principles to fatigue management: documented formal duty/rest policies and fatigue mitigation training. White also emphasized the importance of applying these policies and training requirements across the entire operation. For example, flight department schedulers often provide around-the-clock coverage and receive calls in the middle of the night. Those schedulers are making decisions after being woken up and often during a circadian low, or natural dip in energy level. Maintenance personnel often work overnight shifts to prepare an aircraft for the next morning's departure. Fatigue management is critical to conduct overnight shift activities safely.

FORMAL FATIGUE POLICIES

"Many flight departments rely on 'understood' or informal policies related to fitness for flight," said Mark Larsen, NBAA's senior manager of safety and flight operations. "This is especially true of duty and rest time limitations. However, it is much easier to enforce formal, documented policies. It is also easier for a pilot to admit they are fatigued if reporting policies are clearly communicated and encouraged."



NBAA and the Flight Safety Foundation (FSF) last year published *Duty/Rest Guidelines for Business Aviation*, a publication designed to help flight departments set expectations using science-based standards within their own organizations.

The document begins with a discussion of fatigue factors and then provides recommendations for duty and rest scheduling. The final section introduces several elements of fatigue management and fatigue countermeasures.

"Ensuring pilots are fit to fly requires proactive management to look at pilot schedules, including retroactive schedules and prospective schedules," said Quay Snyder, a medical doctor who has a master's of science in public health and is president and CEO of Aviation Medicine Advisory Service. "Flight department managers should consider whether scheduling tools use NBAA's duty guidelines. If they aren't consistently implementing those guidelines, their index of suspicion for pilot fatigue should be high."

Additional fatigue countermeasure policies and procedures might be necessary in flight departments that have complex operations. For example, when a duty day includes a period of six hours or more of standby time at an intermediary stop, a local hotel room can be provided to the pilots to extend the duty day. The NBAA/FSF guidelines recommend one hour of extended duty time (not flight time) for every two hours of hotel rest time.

The *Duty/Rest Guidelines* also call for "operation-wide fatigue education and training that includes comprehensive, science-based educational content and training that applies scientific principles to the specific fatigue challenges within the flight operation."

"Fatigue training shouldn't consist of a pilot reading some slides," said White. "It's important that the individual understands the physiology behind fatigue and learns how to apply that knowledge to different scenarios."

White noted that aviation authorities in many parts of the world require fatigue management training, although the required content and frequency of training varies. The International Civil Aviation Organization mandates fatigue

EATING FOR OPTIMUM PERFORMANCE

Do you eat to ensure your optimum performance in flight? In 2009 the University of North Dakota (UND) published a surprising study that found pilots who consumed fatty diets performed the best in a series of tests. In fact, according to the study, pilots who consumed high-fat and high-carb diets out-performed pilots who consumed high-protein diets, with high-fat eaters even slightly out-performing high-carb eaters.

However, other aviation and nutrition experts found the study surprising, as this study's results are contrary to commonly accepted nutrition advice, including the standard food pyramid and currently popular food regimens such as "Paleo" and others.

Danielle Wesse, a certified health counselor and the owner of Naturale Nutrition, is a pilot and nutrition expert who focuses on overall wellness and providing pilots and other flight crewmembers with strategies to perform their best in the cockpit and in life. She questions the validity of the UND study, countering its results with years of experience and other trusted research.

"Diets and nutrition are not one-size-fits-all concepts," said Wesse. "However, there are some commonalities that occur when examining food consumed and overall performance." As a pilot with extensive aviation experience, Wesse has firsthand experience in using food to achieve optimum performance in the cockpit. She encourages flight crewmembers to consider the following when preparing for flights:

- Consider eating salmon and ginger, steamed kale, a baked sweet potato and an apple prior to your flight. "Planes are breeding grounds for germs. Eating salmon beforehand may help boost your immune system. Astaxanthin – the compound that gives salmon its pink hue – can make your body more efficient at fighting off viruses, said Wesse. "Steamed kale and sweet potatoes are sky-high in vitamin A, which protects mucus membranes in the nose. This is the body's first line of defense against bacteria. One apple has four grams of fiber, which can increase the production of virus-fighting proteins."
- Wesse recommends adopting a "Paleo" lifestyle which focuses on lean proteins, fruits, vegetables and healthy fats – or similar eating style. "Diets high in protein and healthy fats help sustain energy and prevent sugar spikes," she said.
- Wesse also suggests looking at your medicine cabinet. Many Americans take multi-vitamins and think they are "covering all the bases." Wesse recommends skipping the multi-vitamin and instead supplementing specific vitamins and minerals like melatonin, vitamin D and omega 3. "Multivitamins might not be the way go if you eat a balanced diet in the first place," said Wesse. "It is often best for people to supplement specific needs instead." (Be sure to consult with your physician before taking supplements.)

risk-management systems in Annex 6 – Operation of Aircraft and provides guidance regarding training program content and frequency.

ADDITIONAL FITNESS FACTORS

Snyder cautioned that NBAA's duty and rest guidelines were written for healthy pilots. He explained that a number of variables could impact an individual's flight performance, need for sleep and ability to obtain quality sleep.

A new baby, other home stresses or illness can increase an individual's fatigue. Sleep apnea, diabetes, hypothyroidism (low thyroid disease) and lung problems (particularly in smokers) can adversely affect an individual's fitness and fatigue levels, said Snyder. Psychological and psychiatric issues can also impact sleep and fatigue.

Many pilots are also unaware of the potential effects of medications on flight performance. The NTSB published a study that examined the use of over-the-counter, prescription and illicit drugs based on toxicology testing of fatally injured pilots between 1990 and 2012.

Many medications – some seemingly harmless – have profound effects on an individual's fatigue, alertness and response time. Sedating antihistamines such as diphenhydramine, which is found in Benadryl and other allergy medications, were the most common positive finding in the NTSB's study. In fact, the FAA recently published a policy to require a 60-hour wait time from the time the pilot last doses with Benadryl until the pilot assumes flight-related duties.

"Pilots need to keep in mind the side effects of a medication are only part of the equation," said Larsen. "In many cases, the underlying condition being treated – even if seemingly minor – can have a significant impact on a pilot's ability to perform flight duties at a high level."

Another issue related to fitness is age. Older aviators often have difficulty adapting to circadian changes, particularly those required of long-haul international pilots. Older pilots also tend to have more chronic diseases and take more medications long term.

Flight departments should ensure that formal policies instruct pilots not to fly when ill or otherwise unfit, and resources should be provided to help the pilot determine if an illness might substantially impact flight performance.

PHYSICAL FITNESS A SHARED RESPONSIBILITY

"Be aware of pilots not wanting to fly with another pilot," said Snyder. "This could indicate a performance problem with the avoided pilot. Sometimes pilots will cover for each other, thinking a situation is 'not bad enough' to report as a concern." These behaviors should be red flags. "Ensuring pilots are fit to fly requires proactive management to look at pilot schedules, including retroactive schedules and prospective schedules."

QUAY SNYDER

President and CEO of Aviation Medicine Advisory Service

"Physical fitness for flight is really a shared responsibility," said Snyder. "It requires honesty and openness from an individual pilot, fellow pilots and management to communicate openly to avoid a problem. We pilots tend to be very stoic and mission-oriented when, in fact, we might be able to accomplish the mission – but not safely."

White acknowledged there might be times when an operator must conduct flights that do not comply with its written policies. "If there is some legitimate reason to fly outside of the company's guidelines, flight department managers and pilots need to have a plan," said White. "All parties involved in the flight operation need to know the risk of fatigue and know how to mitigate that risk."

Does that advice sound like safety management system (SMS) lingo? It is. Fatigue reporting should be part of any SMS. Further, fatigue-related variables, such as length of duty day and number of hours of rest prior to the flight, should be included in flight risk assessment tools. These tools can help track fatigue and other fitness concerns, as well as build a data-based argument to support department policies.

"Many flight departments find the challenge in fatigue management is related to [explaining policies to] their primary passengers," said White. "Flight departments need a way to systemically track fatigue and back up fatiguerelated decisions when talking with their primary passengers. Documented fatigue policies based on science can be very helpful in these discussions."

"Fatigue and other physical fitness concerns are a necessary aspect of dealing with the human machine," said Larsen. "But sound, documented policies, comprehensive training and open communications measures enable a flight department to mitigate the significant risks of fatigue and illness." :-

Review the Duty/Rest Guidelines for Business Aviation at www.nbaa.org/fatigue and review NBAA resources for medical issues at www.nbaa.org/medical-issues.

BECOME A CONTRACTOR OF A CONTR





PARTNER

With Headquarters

This five-step plan can strengthen your flight department's relationship with 'downtown.'

raditionally, the flight department was considered separate from the company headquarters. However, that concept has changed considerably over the past few years, as flight departments strive to bridge the gap between the hangar and headquarters. The May/June 2015 edition of Business Aviation Insider launched a four-part series looking at how flight department managers and personnel can help ensure

a positive, effective relationship with the company's headquarters. The second installment gave thoughtful advice on how to choose or become a strong aviation director.

The following third article in the series outlines five steps that flight department personnel can take to become a strategic partner with the executive team and headquarters personnel.



1. COMMUNICATE WELL AND OFTEN

Effective and frequent communication is the first element of becoming a strategic partner with headquarters. David Wyndham, president of Conklin & de Decker, suggests that aviation managers spend time with the aircraft users – and not just while en route – as well as other headquarters staff.

"A flight department might be vulnerable if the aircraft is considered the chairman or president's private aircraft and no one else in the company understands what the flight department does or what benefit it provides the organization," said Wyndham. "Aviation managers should spend some time 'downtown' and attend headquarters staff meetings and other events just to take the pulse of the company and be a part of the company's success planning."

For Doug Duggan, chief pilot of Southwestern Energy, being co-located at company headquarters was important, so seven years ago he chose to establish his office downtown instead of at the hangar. The company used to operate a corporate shuttle and flew headquarters personnel regularly. "Then, our pilots

"Effective and timely communication is a key element to building strong business relationships."

> KEITH SHELBURN, Flight Operations Manager for a Fortune 500 Company

had an opportunity to meet a lot of the headquarters staff," said Duggan. "But once the shuttle slowed down, I knew it would be important to be at headquarters. Proximity is key."

Other flight department managers, like Keith Shelburn, who manages a Fortune 500 company's flight operations, don't think proximity to the executive team is necessary if the aviation director communicates in a manner and with a frequency expected by the executive team. Shelburn has a monthly meeting with his supervisor to report on and discuss the flight department's operational and financial performance, as well as long-term company strategic needs. Alternatively, some aviation directors find benefit in attending weekly or monthly management meetings at headquarters to keep their finger on the pulse of the company.

"Effective and timely communication is a key element to building strong business relationships. It's critical to how and when people want to be communicated with – by cell phone, texts, emails or one-on-one face-to-face," said Shelburn. "Communication in the method preferred relative to the situation is important. It shows you are responsible to the business and also that you respect the value of the executive's time."

2. BUILD TRUST WITH THE EXECUTIVE TEAM

How does an aviation director build trust with the executive team or even get time with busy executives in the first place? Shelburn points to three key elements of a strong relationship between the aviation director and executive team.

"An effective aviation director needs to have an executive presence," said Shelburn. "He or she needs to be seen as a good fit with the executive team and should be knowledgeable of both the aviation world and business concepts, including basic capital and expense accounting terms and procedures."

Being a good communicator – able to speak and write well at the executive team's level – is the next step.

Finally, Shelburn says precise preparation, accurate reporting and sound analysis is another way to earn respect and trust.

"Be in touch with your business," said Shelburn. "Senior executives know their business inside and out. You need to know your flight department and our industry [business aviation] just as well." Effective, judicious use of an executive's time will help ensure that future requests for face-to-face meetings with the executive are granted.

In other words, successful leadership, which includes these three elements, is essential to building trust with the executive team. Demonstrating consistent excellence in your position will help you earn the trust and respect of the executive team.

More characteristics of a great aviation director were discussed in an earlier article in this series: "The New-Generation Aviation Director" (*Business Aviation Insider*, July/August 2015, page 18).

3. ANTICIPATE NEEDS

An aviation director who demonstrates a strong partnership with headquarters is able to anticipate the needs of the company. These can be long- or short-term requirements of the organization. For long-term needs, Shelburn recommends that flight department managers become knowledgeable about aircraft asset management. This involves establishing an aircraft ownership and operational strategy.

How long will you intend to operate the aircraft? Should you buy new or used? Is aircraft availability critical, or can you accept long periods of down time? Are flat maintenance costs desirable? The list goes on.

The next step is aircraft selection. What range is required? What are the runway performance requirements? How many passengers

"Aviation managers should spend some time 'downtown' and attend headquarters staff meetings just to take the pulse of the company and be a part of the company's success planning."

DAVID WYNDHAM, President, Conklin & de Decker

are typically carried? Within the selection of aircraft models that suit your needs and budget, how does their average annual market depreciation compare? How do their operational and inspection costs compare? All these factors make up the life-cycle cost of an aircraft within your planned ownership period.

Aviation managers should help their senior leadership create the aircraft strategy that suits their needs, recommend a best choice, support your decision, seek their agreement and then execute the plan. Revisit your plan annually to make adjustments for changes in the needs of the business and market conditions, said Shelburn.

Wyndham says that when aviation managers and other flight department personnel are actively engaged in the company's planning and development, they often see ways the aircraft could be used more productively to meet company goals. For example, knowing the organization's plans for future growth or movement can enable the flight department to prepare for possible trips to new company facilities.

4. COORDINATE RESOURCES

Many organizations struggle with maximizing coordination between the company's corporate travel department and the flight department. Some flight departments give the travel department read-only access to the aircraft scheduling software. When an employee makes a travel request, the travel department checks the flight department's schedule before securing airline tickets. Typically, the lead passenger is given the option of allowing extra passengers on the aircraft.

Other flight departments email a daily or weekly schedule of anticipated flight department trips to the administrative assistants of the company's most frequent travelers. This enables other travelers with flexible needs to arrange trips to coordinate with the flight department trips, if possible.

Wyndham stresses the value of coordinating resources, not just in travel logistics, but also in administrative and financial matters. He recommends that flight department managers harmonize with the headquarters personnel who work with the flight department's financials. A coordinated approach between the finance department and the flight department can alleviate many concerns by providing an easy avenue for the finance department staff – often unfamiliar with aviation – to seek answers.

5. ENGAGE YOUR ENTIRE TEAM

Jo Damato, CAM – NBAA's staff liaison for the Schedulers & Dispatchers Committee – encourages flight department managers to include non-flying professionals such as schedulers and flight coordinators in their relationship with headquarters.

"Schedulers and others in the flight department typically have the most frequent interaction with headquarters personnel," noted Damato. "From day-to-day scheduling to – in the worst case – emergency response, people in these flight department roles benefit from in-person relationships with their headquarters counterparts."

Personal rapport with headquarters personnel and their general understanding of aviation is critical, especially when dealing with potentially difficult conversations, like why a flight now requires a fuel stop when it previously didn't. Educating headquarters staff and establishing a personal relationship with executives and their support staff can make these discussions less stressful for all involved.

For example, the flight operation managed by Shelburn hosts a luncheon once a year for the executive team's administrative assistants. This event enables all the key players who typically work via email and phone to get better acquainted.

Building close relationships between the schedulers of one Northeast flight department and the company's headquarters staff has paid dividends when flights don't go as planned.

"Sometimes, when we have to mitigate conflicts for [aircraft] use or deal with delays due to weather or other circumstances [the message] is not properly relayed to the lead passenger or stakeholder of the flight schedule," said that flight department's scheduling manager. "Building relationships with the executives and their assistants is critical for building trust in our communication. When the flight department says that we can make the trip work but not quite as requested, the executives and their assistants trust that we have their best interest, the best interest of the company and safety in mind at all times." :•

Learn more about this topic at the NBAA Leadership Conference, Feb. 22 to 24, 2016, San Antonio, TX. Register at www.nbaa.org/leadership/insider. Watch for the final article in this "Hangar to Headquarters" series in the November/ December issue of *Business Aviation Insider*.



BARREERS

Ensuring collaboration between pilots, schedulers, maintenance technicians and flight attendants is a never-ending but worthwhile quest.

hen I came into business aviation 20 years ago, there was this parochialism in the industry," said Jim Buchanan, a Certified Aviation Manager (CAM) and administration director for a Fortune 100 company's aviation department. "It seemed the pilots knew they were the most important people in the flight department, the mechanics knew they were the most important, and," Buchanan added humorously, "the schedulers let everyone else think that while knowing they really ran the department."

Walk into a Part 91 or 135 hangar today, and the culture will feel different, but a flight department isn't like other business units: it's made up of professionals with very different skills, performing specific jobs in settings as different as a cockpit, a hangar or a desk. That tends to create functional silos.

"Traditionally, those silos were pretty stout and strong," said Buchanan, who is also chair of NBAA's CAM Governing Board. "And that certainly made the business less efficient, because you don't fully consider the influences of the other functions."

While shifts in workplace culture and industry initiatives like the International Standard for Business Aircraft Operations (IS-BAO) have driven more collaboration between pilots, schedulers, maintenance technicians and flight attendants, there's still a need to focus on working together.

"When it comes to breaking down silos, I don't think you're ever really done," said Pat Cunningham, director of aviation for PepsiCo, who, like Buchanan and all other sources for this article, is also a CAM. "It's something you work on every day and every year, by emphasizing that we're all in this together."

DAMAGING TO CUSTOMER SERVICE AND SAFETY

Silos aren't just inefficient; they can lead to service lapses that undermine the mission of the flight department.

"I call it the 'stealth airplane effect," said Blair Robson, manager of aircraft maintenance at a



Dallas-based Fortune 50 company. "The pilots come back with a list of minor discrepancies in the log, and we don't have time to address them before the next flight. If the pilots had called those in from the road, we could've ordered parts and cleared the discrepancies before the next flight."

Maintenance technicians need to be proactive, too, by notifying the schedulers when they need to take the airplane out of service for maintenance over the next few months, and for how long. That way, schedulers can help advise which days are best to have the airplane out of service, based on passenger needs.

An interruption in service is a big lapse, but flight departments can fall short of customer expectations in lots of little ways if they don't communicate. Passengers often think of the flight operation as one seamless service. They may not know they're talking to a contract flight attendant who the department only hires four times a year, so if they tell that member of the crew they're allergic to a certain food, they'd be disappointed to be served it again.

"The airplane can be perfectly safe and dispatch-ready, but not mission-ready," said Kellie Rittenhouse, director of aviation services for Hangar Aviation Management. "If a passenger gets on the plane for the third time, and the Wi-Fi isn't fixed, they're going to think you didn't listen to them [when they noted the outage previously]. But the pilot they told may not fly that airplane again for six weeks."

Flight departments need ways to share information, whether through post-trip briefings or reporting processes, so aviation personnel note – and address – passenger requests, squawks and safety hazards.

"We know that accidents are never caused by any one thing; they're the result of an error chain," said Rittenhouse. "If you have a culture where people can't speak up, then you expose yourself to more risk."

Like customer service, safety depends on a sense of shared ownership and proactive communication.

"If you're a pilot, and you've been on the road all day, of course you want to return to home base and sleep in your own bed," said Rittenhouse, "but if it's dark and the weather's bad, is that best? With a safety management system (SMS), you do a risk assessment for every leg, and you have another set of eyes. Probably 99 percent of the time, it won't change your decision, but safety comes down to what you do that 1 percent of the time." "There's always a communication gap between pilots, maintenance and schedulers, because we all have different levels of knowledge depending on what we're talking about."

BLAIR ROBSON, CAM and Manager of Aircraft Maintenance at a Fortune 50 Company

When everyone in the flight department has a greater sense of ownership, no one stands alone. "You're looking at everything through a different lens," said Rittenhouse. "As ownership goes up, entitlement goes down in direct proportion."

THE COMMUNICATION GAP

Changing attitudes is important, but in order to work collaboratively, flight departments need to overcome the inherent challenges to communication between aviation functions.

"There's always a communication gap between pilots, maintenance and schedulers, because we all have different levels of knowledge, depending on what we're talking about," said Robson. "If the pilot calls about a glitch with the flight management system (FMS), I don't use it everyday, so I probably won't know what he's talking about, but if the pilot calls about the flaps, he might not even know how to run the diagnostics I'd recommend."

One way around this problem is to encourage quick pre-flight briefings and post-flight debriefs between flight crews and maintenance staff. "We always have a two-minute meeting in the hangar before and after a flight, so the pilots and maintenance folks can talk," said Robson, who says sometimes it's just going over how the flight went and if there were any squawks.

It's also especially important for flight department leaders, such as the chief pilot or maintenance director, to be able to communicate with their functional counterparts.

"In years past, it was through attrition or seniority that you became chief pilot, but that says absolutely nothing about your qualifications as a manager," said Bill McNease, vice president of flight operations at Priester Aviation. "You might be a heck of a pilot, but a poor communicator."

Directors who understand this tend to invest in professional development for their managers and up-and-coming leaders by sending them to colleges that offer aviation management courses. These college programs, like NBAA's CAM program, emphasize leadership "soft skills," as well as the financial, legal and regulatory aspects of aviation management.

On the job, directors can create opportunities for people to collaborate across functions. Cunningham ensures that his department's customerservice committee and safety committee are composed of people from different functions.

WORKING TOGETHER

This can help overcome other types of silos, in addition to those between aviation functions, such as between hangar and headquarters, or between the staff at one base and the staff at another. "We have a base in New York and a base in Texas, and that can be an even bigger divide for us," said Cunningham, "So as often as we can, we have pilots from different sites fly trips together."

Even if staff members are split between locations, having them call into flight department meetings can be important. Also, giving different people in the department a chance to present at staff meetings can boost a shared sense of ownership.

There's no standard rule for how often to hold staff meetings. At Priester Aviation, McNease runs a daily meeting from 9 to 9:30 a.m. The chief of staff, director of maintenance, CFO and other managers participate.

"It's a roundtable," said McNease. "We go over the trips scheduled for today and tomorrow, the weather, any maintenance issues across the fleet, how we're doing against our budget and anything to plan for." The meetings offer leaders at Priester an opportunity to collaborate in real-time, to maximize aircraft availability, customer service and safety.

"For example," said McNease, "if the director of maintenance says we have an airplane coming out of inspection in four days, the chief pilot will ask how many crew we need for a test flight and to get it back to home base. Do we need to airline them out? Do we need contract crew? We work through all that together."

On a person-to-person scale, mentoring can also help professionals from different functions understand each other.

"For example, if you hired a new pilot," said Buchanan, "and in the first six months of their training they spent half a day shadowing the director of maintenance, observing a quality inspection or maintenance planning, that would build trust and confidence. It will give that pilot a greater appreciation for what the technicians do to return an aircraft service. It will build the lines of communication, and we break down silos when we communicate with each other."



MANAGEMENT GUIDE HELPFUL HINT

While the NBAA Management Guide does not specifically address the notion of silos within the flight department, the "Aviation Department Personnel" section (1.6) notes that one of the responsibilities of the aviation department manager or director of aviation is "maintaining high morale through an awareness of company and department policies, employee development programs and periodic department meetings for the two-way communication of ideas, goals and objectives."

By holding regular aviation department meetings that include all personnel, the department manager creates a venue where concerns can be raised and addressed, thereby helping break down the silos between departments and encouraging collaborative solutions to flight department challenges.

www.nbaa.org/management-guide

MEMBER PROFILE

Flying High and Not Leveling Off

Nationwide's aviation department enhances operations daily.

PHOTOS © MORGAN ANDERSON PHOTOGRAPHY



viation is not an industry for staying put. It's literally about reaching new heights. The aviation operation at Nationwide Insurance in Columbus, OH has made a department-wide habit of finding new ways to improve.

In 2010, the department earned an NBAA Safe Flying Achievement Award for 50 years of accident-free flying, and the flight operation continues to find ways to enhance safety and customer service, which has earned it praise from passengers.

"It's exceptional customer service, and we're truly co-workers with the flight team," said Jeff Rommel, pres-

REIMAGINING THE PASSENGER EXPERIENCE

If a passenger asks for something once – such as a granola bar on a short flight or a garment mending kit – it'll be on the plane the next time – and every time – they fly. If the passengers are running late from an all-day event, the pilots will have catering waiting for them without being asked. "Then my team can eat and debrief on the flight back," said Rommel. "It's a flying meeting. We're leveraging every minute we've got together."

Delivering that level of service depends on a great deal of behind-thescenes coordination, made easier by Nationwide's collegial aviation department culture, where everyone backs each

"We perform every day as if we're being tested on our professionalism and customer service. We have to continue looking for ways to wow our customers."

-DAN WOLFE, Associate Vice President and General Manager of Aviation

ident of independent distribution for casualty and property insurance, who flies on the aircraft about twice a month. "They're a world-class group of people, and very quick to make themselves available."

The pilots, schedulers and maintenance technicians at Nationwide share a sense of pride in exceeding the expectations of the passengers who fly on the company's three Bombardier Challenger 605s.

"We don't distinguish between our passengers; we value all of our customers," said Diane Bassetti, the flight coordinator and office manager. "We strive to be the best, and there's always room to improve." other up. When a flight's late returning to base, the pilots tell maintenance technicians not to wait; they can tow the airplane into the hangar themselves.

"We perform every day as if we're being tested on our professionalism and customer service," said Dan Wolfe, associate vice president and general manager of aviation. "We have to continue looking for ways to wow our customers."

To really go beyond passengers' expectations, Wolfe reimagined what their experience could be from the moment they arrive at the airfield, and he changed the name of his department to the Nationwide Aviation Business Center. More than just a hangar, the



Nationwide facility on Port Columbus International Airport (CMH) has a large conference room, private alcoves for making phone calls and a lobby for passengers to gather before a flight while a safety video plays.

"Our passengers often times need to meet in our conference room right before or after a flight to actively build the business," said Wolfe. It's also where Wolfe's staff conducts safety training and department meetings.

HAZARD MITIGATIONS YOU CAN SEE

It takes the same attention to detail and collaboration that Nationwide's aviation personnel invest in customer service to achieve continuous improvement in safety. The flight operation has twice earned Stage 3 certification for the International Standard for Business Aircraft Operations (IS-BAO).

"One of the best things that happened to our aviation department was IS-BAO and bringing a safety management system into our culture," said Chief Pilot Mark Hente. "We have great discussions at our safety meetings. If something comes up, we just talk it through and "One of the best things that happened to our aviation department was IS-BAO and bringing a safety management system into our culture."

-MARK HENTE, Chief Pilot

come up with a solution. You can walk around this building and see and touch the hazard mitigations we've come up with."

At one meeting, the safety committee discussed a "hit report" submitted by a pilot after a winter flight to Des Moines, IA. As the flight manual calls for in cold weather, the crew spun the engine fans during pre-departure inspection. They went outside to check the fan, but in the freezing rain, there was ice on the wing and it was unsafe to climb up on a ladder. To complete the inspection, the crew delayed the flight and returned to the hangar.

After that safety meeting, Maintenance Technician Erick Hildebrandt designed a handheld, telescoping pole with a mirror mounted on the end. It's now standard equipment for checking the fans and intakes on all Nationwide flights.

"It's probably a \$40 tool," said Wolfe. "Safety culture is not about resources, it's all about your attitude and the ability to perform. With IS-BAO, we're all part of a process to improve, and that's our whole foundation."

IT STARTS WITH PERSONAL IMPROVEMENT

Wolfe understands that an aviation team that continuously improves depends on each person in that department to strive to be better, and he strongly encourages his team to pursue career development. Wolfe and two other pilots have MBAs,

Exceeding passenger expectations is a priority for Nationwide's Dan Wolfe and his aviation department team.



and three more are working toward their MBA. Chief of Maintenance Gib Harris and Senior Technician Joe Lippert are both Certified Aviation Managers (CAMs). Harris also is a member of the Bombardier Challenger 600 advisory committee, as is Senior Captain Scott Peters.

In fact, nearly every member of the Nationwide team is involved in an industry group of some kind, including the Central Ohio Chapter of the Professional Aviation Maintenance Association, or the Ohio Regional Business Aviation Association, where Captain Jeff Poeppelman currently serves as president. And Nationwide staff members attend almost every NBAA conference on the calendar, often presenting in education sessions.

"We want our people out there, talking to other operators and bringing back new ideas," said Hente. "We're looking to advance our people and make the whole industry better."

Nationwide also gives back to the industry through its maintenance internship program for students at Columbus State University. Nationwide has run the program every year since 2007 and hosts as many as two interns at a time.

"It's one of the things we're most proud of," said Lippert. "It's maintenance fundamentals. It doesn't matter if it's maintenance or flying, the foundation is about following a checklist every time; it's about the details." :•

Learn more about this NBAA member at www.nationwide.com.

SNAPSHOT: NATIONWIDE AVIATION BUSINESS CENTER



Base: Headquartered on Port Columbus International Airport (CMH) in Columbus, OH



Aircraft: Three Bombardier Challenger 605s



Personnel: 10 pilots (including a department manager who flies), four maintenance technicians, one scheduler, one flight coordinator/ office manager and one administrative assistant.



HOW SOLUTIONS TO DES MOINES-COLUMBUS TRAVEL REQUIREMENTS EVOLVED

Nationwide acquired Allied Insurance in 1998, and the merger of the two companies created a need for numerous employees to travel between Columbus, OH, and Allied's offices in Des Moines, IA. What would be a 10-hour drive across four states is less than an 80-minute trip by air, but there are no direct airline flights.

"Des Moines is not hard to get to," said Associate Vice President and General Manager of Aviation Dan Wolfe, "but you have to go through Minneapolis or Chicago and spend an overnight." The situation "demanded a solution to transport people as efficiently as possible."

Starting in 2005, Nationwide contracted with a regional carrier to provide direct scheduled service four times a week, initially using a 37-seat aircraft and later a 50-seater.

Travel requirements declined after the 2008 economic downturn, so Nationwide flew the route with its own aircraft on an on-demand basis. When travel to Des Moines increased, the company based a jet there for a couple of years to reduce the number of deadheads from Columbus.

Today, the solution is a "flex shuttle," dispatching one of their 10-seat Challenger 605s to Des Moines and making it available to everyone in the company, based on aircraft availability.



Special Report: *Aircraft Acquisition Planning and Financing*

ONE OF THE ultimate attractions of business aviation is the ability to take to the skies on a schedule that fits your company's needs – be it through charter, fractional ownership, aircraft leasing or an outright business aircraft purchase.

If outright ownership isn't right for your company's needs, charter, fractional ownership and, to a lesser degree, aircraft leasing provide scalable options to achieve the benefits of business aircraft use, even if you're flying only 50 hours a year.

"Business aircraft are becoming something you have to have when you get to a certain level in the business world," said Jeff Wieand, senior vice president of Boston Jet Search, Inc.

All this being said, acquiring a business aircraft requires careful analysis and planning to help you decide which form of ownership fits best and which type of aircraft is right for your needs, and to ensure that the aircraft you ultimately purchase offers the best value.

"One of the things people need to think about starting off is how much

they're going to use the airplane in their business," said Wieand. "Federal Aviation Regulations, the Part 91 regulations, are designed for businesses to operate the airplane in the service of the business. Personal use is ancillary, so the more the ownership structure fits that model, the easier it's going to be for someone to comply with FAA regulations."

That's especially true if the user plans to deduct aircraft expenses for tax purposes. But first things first. Deciding on the proper ownership structure depends on the user's needs.

"I tell a potential client that I am here to understand their travel needs," said Lee Rohde, president and CEO of Essex Aviation in Portsmouth, NH, an aviation consultancy that guides clients through the many options of business aircraft ownership. "If you already have [ownership experience], we review that. If you're new to it, we talk to you about what's out there, the options that can meet your needs, and the pros and cons. We look at it from the real-life operational perspective." Each form of business aviation usage offers certain advantages, based on the user's needs and average total flying hours. What follows is a brief overview of some of the more popular options.

CHARTER AND FRACTIONAL

Air charter is often the easiest way to begin using a business aircraft. Typically it's best for those flying around 50 hours or less per year. The cost of ownership is focused totally on usage. There are no upfront capital costs or maintenance fees. You simply pay for travel time, which makes charter ideal for those who only fly occasionally. Users can fly round-trip, one-way or from one point to another. The main drawbacks to charter are that access and aircraft availability can be limited during high-demand periods, and the tax benefits of aircraft ownership are not available.

Once you reach the 50- to 100-hour per year flying threshold, fractional ownership can start to be a more attractive option. You actually purchase a "share" of an aircraft, which often provides improved aircraft availability and certain tax benefits. However, the upfront costs are higher, since there is a capital expense in purchasing an ownership share of a business aircraft. You also pay a monthly fee for administrative and maintenance costs, plus a per-hour fee for usage. Fractional shares usually are sold for a fixed period of time – usually three to five years. Depending on the contract provisions, ownership shares can then be sold back to the provider at current market value.

"Fractional ownership is a contained cost," said Rohde. "However, at some point you may reach a point where you don't want to share an airplane, or don't want to fly on a different aircraft with a different crew every time."

Rohde added that the capital cost of fractional ownership has been fairly low since 2009 because many providers stopped buying new aircraft during the Great Recession. "So you were buying an existing aircraft in the fleet, which had already been depreciated in value," he said. However, many providers now are updating their fleets with new models, which is driving up share purchase costs. "I have a client who owns two shares, and both of those airplanes are coming out of the fleet," Rohde said. "[The provider] has sent him proposals to roll over their shares into one of the new planes."

The cost for a fractional share for new jets can be more than \$1 million. Rohde said the companies do need to update their fleets, but the price tag has forced some of his customers to consider other options.

AIRCRAFT LEASING

A popular option for many business aircraft users, leasing is available in two types: wet and dry leases. In wet leasing, the structure is similar to aircraft charter in that the aircraft owner (lessor) provides the aircraft, crew, maintenance, and insurance to the lessee, who pays only for hours operated. In a wet lease scenario, the aircraft lessor is the operator of the flight and maintains control of the aircraft. The lessee pays for fuel, airport fees and any other duties, taxes, etc. Wet lease terms usually run from one to 24 months.

With dry leasing, an aircraft financing or leasing company (lessor) provides only the aircraft, similar to when a company leases a piece of equipment. The lessee pays for insurance, crew, ground staff, supporting equipment, maintenance and other costs. A typical dry lease runs two years or more and the lessee is the operator of flights on the aircraft during that time.

However, for at least some companies, leasing's popularity has declined recently, due mainly to the negative impact of the market downturn starting in 2008. In fact, many banks have stopped writing leases altogether as planes begin coming off leases with market values well below the projected residual values that were set at the time the leases were written.

"Luckily, we didn't do leasing," said Bradford L. von Weise, director and head of global aircraft finance at Citi Private Bank, a unit of Citigroup. "Those [lenders] who did are facing lease returns that are underwater. If they haven't already had to mark to market those assets, they're in for some pretty ugly surprises."

WHOLE AIRCRAFT OWNERSHIP

Exactly when is the right time to buy an aircraft? That's a question many aircraft purchasing consultants and brokers are asked routinely, and for the most part, they say there are a lot of variables to consider. As a general rule of thumb, ownership makes sense once you're racking up lots of flying hours.

"We find that 150 hours per year is generally the tipping point where whole aircraft ownership is financially more cost-effective than the other options," said Robin Eissler, president and CEO of Jet Quest, an aircraft brokerage service based in Georgetown, TX. "With the various fractional programs, leases and jet cards available, this sometimes depends on the region."

But the decision on whether to buy outright or pursue other, less capital-intensive options really comes down to buyer preference and need. For that reason, the experts interviewed for this story said the process starts with careful analysis.

"The whole business ownership experience has certain steps in it," said Mike Bloom, president and CEO of Bloom Business Jets, an aviation brokerage and consultant service based in Castle Pines, CO. "You don't want



to go out and say, 'I have \$5 million, let's go shopping.' Without analyzing, they go out and pick their favorite plane. To the uneducated, that works okay, but for us it really doesn't. It's a shot in the dark."

Eissler agrees. "The first step we take with our clients is doing a needs analysis to create an aircraft utilization profile," she said. "This helps us determine how many hours the client will use the aircraft and also the types of trips and passenger loads that will be required."

For the potential buyer, especially a first-time purchaser, the process also requires a lot of research. "The most important thing in buying an aircraft, no matter where it is, is that you've done your homework and that you're buying one that is right for your mission – for the use that you need of the aircraft," said Susan Carriere, partner with Carriere & Little LLP Aviation Business Attorney in Englewood, CO.

Naturally, the process also involves choosing between buying a new or pre-owned aircraft. Given the severity of the downturn starting in 2008, there are many previously owned aircraft on the market that can provide comparable performance at a lower cost compared to factorynew airplanes.

On the other hand, several business jet makers have introduced new, more capable models equipped with the latest avionics and wireless connectivity equipment, which is a big draw for some buyers. However, pricing and availability can vary depending on the market segment.

"In the upper end on the new side, things still are going pretty well," said Bill Quinn, president and CEO of Aviation Management Systems, The most important thing in buying an aircraft is that you've done your homework and that you're buying one that is right for your mission – for the use that you need of the aircraft.

Inc., based in Portsmouth, NH. "With the new side, you look at the order backlog and how many years out they are, how many they are delivering and how consistently they are delivering."

With larger aircraft, in other words, given the demand and longer lead times required from order to delivery, there might be significant wait times, as well.

Buyers moving from a used to a new aircraft often are doing so because of a change in business need, one typically related to company growth or business direction. "Usually, a person wants a new production plane, not because they like new planes…but because it provides a mission fulfillment they couldn't get buying pre-owned," said Jay Mesinger of Mesinger Jet Sales in Boulder, CO.

Pre-owned aircraft are much more affordable, especially given that pricing on many models remains near historic lows, especially on older aircraft. Given the slump in new construction between 2009 and 2013, the market for late-model pre-owned business aircraft is fairly limited, the experts say. Those late-model airplanes also are in great demand – when they can be found. "Late models with current avionics technology and WiFi capabilities definitely increases the salability of an airplane," said Eissler.

For buyers willing to invest in some technology upgrades, older aircraft can be very attractive given their historically low pricing. However, they can be difficult to finance, since many lenders won't offer loans on planes more than 15 to 20 years old.

For those who do chose to buy pre-owned, perhaps the most critical component of any purchase, once the analysis and aircraft selection process is complete, is the pre-buy or pre-purchase inspection. It typically follows the offering of a letter of intent by the buyer to the seller and precedes the purchase agreement, which spells out the details of the purchase, including price, delivery terms and location, and any other items of importance.

Once the pre-buy is complete and any necessary repairs have been made under terms spelled in out in the purchase agreement, delivery takes place and the plane is put into service. Most existing owners already have an in-house flight department and/or aviation management service provider in place to maintain and staff the aircraft. However, for first-time plane owners it is crucial early on to decide how the plane will be managed. "When you are a first-time buyer, it is so complicated," said Mesinger. It's not out of the question for new owners to decide to self-manage their first airplane, but others might opt for help in the form of a management company.

A good management company handles maintenance, as well as crew staffing and more. "Make sure they understand aircraft like the one you plan on buying," said Mesinger. "Get references, and get to know them before you hire them."

FINANCING CONSIDERATIONS

Early on in the planning process, additional issues – including financing, aircraft registration and title issues and taxes – also should be carefully evaluated, again with the help of seasoned aviation pros who understand the intricacies of aircraft purchasing and ownership.

When it comes to financing, the experts almost universally say to start the process early. Don't apply for a loan 30 days from closing and think you'll be approved in time.

While most buyers these days pay cash for aircraft purchases, roughly 30 percent of buyers finance their airplane. For those who do, the good news is that lenders now are more aggressively pursuing aviation loans. However, lenders also are very choosy these days about who is offered the best rates. First and foremost, they favor borrowers with solid credit histories.

"Five years ago, lending standards were tighter and the borrowers didn't look as strong, since we were reviewing their financial results from 2007 to 2009, which of course were weak years," said Scott Schaidle, CIT Business Aircraft Finance vice president of sales. "When evaluating a potential client, we're interested in the strength of the borrower and their ability to repay the loan. This is accomplished by evaluating their cash flow, liquidity and leverage. Based on the borrower's financial results, we will structure the aircraft loan to meet their unique requirements."

Given the financial regulatory environment today, lenders are asking for more information than in years past. "It is important to have current financial information prepared and available, and have a good understanding of how the aircraft will be operated," Schaidle said.

Also, thanks to banking regulations passed since the financial crisis, lenders are required to hold more capital against loans. As result, they tend to offer preferable terms and interest rates to borrowers they know well – typically those who do business with them in other areas, since studies show they're lower-risk borrowers, according to von Weise.

"If you want a financing-only relationship, it's going to cost you a lot more money," said von Weise. "Therefore, go to your existing [financing] relationships, discuss this early with them, and if they don't do aircraft financing, consider establishing a relationship with a bank that does, and consider establishing a broad relationship, because you're going to end up paying a lot more money if you don't."

INSURANCE, TAX AND LEGAL ISSUES

Another important part of the loan-approval purchase process is securing title insurance. "Title insurance is becoming more prevalent as banks are starting to require it, as they have with land purchases," said Clay Healey, owner of AIC Title in Oklahoma City, OK.

Available to both the aircraft owner and lender, title insurance protects all parties in a purchase against forgeries, fraud and FAA filing or recording errors. "You want to make sure that if anything ever comes up, [the title company] is going to fight on your behalf," said Healey.

Another invaluable professional any aircraft purchaser will want to have on his/her team is a good aviation attorney, who can guide

It pays to plan, use professional assistance, and take your time when evaluating any form of usage.

you through the maze of legal and tax issues involved in a purchase. Without proper guidance, buyers can fall into costly traps that can rack up significant unanticipated costs.

State tax issues are a particularly complicated area to navigate without proper advice. "In an aircraft purchase, a buyer should be looking at the state taxes," said Nel Stubbs, vice president and co-owner of Conklin & de Decker in Prescott, AZ. These include:

- Sales tax due in the state in which the aircraft is delivered.
- Use tax due in the state in which the aircraft will primarily be domiciled.

- Aircraft registration fees due in the state in which the aircraft is domiciled.
- Ad valorem/personal property taxes due in the state in which the aircraft is domiciled.

"Sales tax is often easy to plan for by taking delivery in a sales-taxfriendly state," said Stubbs. "That is a state in which there is either no sales tax, or the state does not impose their sales tax on aircraft, or the state has a fly-away exemption."

A flyaway exemption is where a non-resident buyer in a state where delivery is taking place can remove the aircraft from that state within a specific period of time and not pay sales tax. "However, once a buyer has avoided the sales tax, it is the use tax that the buyer now needs to be concerned with," Stubbs added.

Some states also assess personal property taxes on aircraft.

"In some cases, the personal property taxes can be reduced if the state apportions these taxes among the states a particular aircraft operates in," said Stubbs. "However, if an aircraft is primarily hangared in a state with a personal property tax, in most cases the tax is due in the county where the airport is located. In some states, individual counties have special rates for aircraft, and it might be beneficial to an owner to look at the different counties in which they could hangar their aircraft."

There also are a number of legal pitfalls potential aircraft buyers need to be aware of. One concerns the so-called "Flight Department Dilemma." Very often, aircraft buyers set up a limited liability company (special purpose entity, or SPE) to purchase and operate the plane because they believe it may protect the owner(s) from potential liability issues. However, if the company is not set up properly, users can face penalties.

"If the only thing that SPE does is own an aircraft, if it also operates the aircraft, it is in violation of FAA regulations unless it has a 135 charter certificate, or some sort of special certification or exception from the FAA," Carriere said.

The reason: According to the FAA, an SPE established solely to own and operate an aircraft, without any other legitimate business purpose, qualifies as a commercial air carrier and must have a commercial air carrier or charter operating certificate. Otherwise the owner is operating an illegal charter service and could be subject to fines of as much as \$11,000 per illegal flight leg, according to Carriere.

In addition, if there is an accident or incident, the aircraft's insurance and financing could be invalidated because the use isn't permitted under provisions of the aircraft insurance policy and/or financing documents.

"It's a big deal," said Carriere. "I would say a high percentage of our clients who come in and haven't consulted a professional aviation specialist have a risk of unknowingly violating that regulation."

So it pays to plan, use professional assistance and most of all – take your time and scrutinize the details when evaluating any form of business aircraft ownership or usage. Those who do, say the experts, will generate the best return on their investment and the most satisfaction from the experience.

OPERATIONS



Dispatch: What Else Can Scheduling Software Do for You?

It's hard to imagine now, but the first business aircraft scheduling software programs were developed for DOS computers, before modern office software, the Internet or mobile phones.

"When I started 17 years ago as scheduler, the idea of scheduling software was really limited," recalled Jo Damato, NBAA's director of educational development and strategy. "It was just a solution to replace paper and pencil, and a huge map on the wall with pins and a string."

Today, scheduling software is at the heart of the flight department, not only used by schedulers and dispatchers, but also by others in the company. Most software platforms support corporate tax and accounting departments and can interface with the company travel departments that arrange airline flights.

Among the roughly half dozen software brands typically used by business aircraft operators, a core set of functions has emerged: scheduling, recordkeeping, reports, budgets, chargebacks and Standard Industry Fare Level calculations. The latest generation of these programs, however, can do much more.

"There are now modules that let us do other things through the software," said Sharon Forbes, supervisor of scheduling operations for DuPont Aviation. "They have interfaces that let us communicate directly with FBOs, international handlers and fuel programs. You can use it from your phone, and it's easier to share and track information."

INTERFACE WITH FBOS

Many scheduling software vendors now – or will soon – provide the ability to reserve services (such as rental cars, drivers, hotels and catering) directly from FBOs. These modules sync with FBOs' systems all the flight information already entered into the scheduling software. "I use that feature every day; it's an invaluable time-saver," said Kathy Hammond, aircraft scheduler for The Williams Companies. "I just click a button to see all the caterers that deliver to that airport, and another button to see rental cars or hotels."

FBOs are the nexus for many ground services that operators book in advance, and they can often provide discounts to passengers and crew on local hotels.

Services like FlightBridge, integrated

Many scheduling software vendors now – or will soon – provide the ability to reserve services (such as rental cars, drivers, hotels and catering) directly from FBOs. into several popular scheduling software programs, automatically send to an FBO the operator's tail number, arrival time and all the services they've reserved. Third-party logistics (3PL) providers, such as Universal Weather & Aviation and Rockwell Collins ARINCDirect, are enhancing their flight department software to provide the same seamless interface with FBOs, as well as all their other services.

Schedulers can also use the FBO modules to save their preferred drivers, view menus uploaded by caterers and communicate special requests. Their flight information syncs with the software in real-time, so if a flight's rescheduled, the user gets an alert to change any hotel or car reservations.

"It makes things a lot easier for trip cancellations, especially because of weather," said Katie Zultewicz, a scheduler for a Philadelphia-based flight department. "I can cancel all the arrangements we've made with one stroke."

When pilots use the scheduling software to print out a trip sheet, all the ground service reservations are printed automatically, including hotel confirmation numbers, phone numbers for drivers and other details to help troubleshoot any potential problems. Many software programs enable schedulers to send pilots and passengers notifications of any changes and receive electronic acknowledgement that their message has been received.

"That way, nothing gets lost in email. You have a trail of communication Scheduling software can also be used for e-APIS submissions, managing corporate shuttle reservations, listing empty legs through charter brokers and offering unfilled seats to charitable organizations like Corporate Angel Network.

saved in the software," said Forbes. "It helps us reduce human error, because we don't have to retype information like passport numbers."

Scheduling software can also be used for e-APIS submissions, managing corporate shuttle reservations, listing empty legs through charter brokers and offering unfilled seats to charitable flight groups like Corporate Angel Network. Schedulers also can use other modules to review upcoming NOTAMs at airports, as well as compare approach procedures, runway length and ground handling services.

MODULES FOR FUEL BUYING AND 3PLS

One of the most-requested features is integration with fuel programs and applications that help with tankering calculations, such as FuelerLinx and AC-U-KWIK. With many of these fuel modules, schedulers can enter a destination city and see a comparison of all their up-to-date fuel prices at nearby airports and FBOs. "We subscribe to about five or six contract fuel programs, and we can arrange all our contract fuel through our scheduling software," said Zultewicz. "We can see who has the best prices and issue the fuel release through the online portal."

Just as they can now sync with FBOs, scheduling software programs are adding interfaces with flight planning and international handling services. Users will be able to sync trip details with 3PLs and use an online portal to select which services they want the handler to provide for each trip.

"Instead of sending an email or picking up the phone, you can do it all through the program and track responses," said Forbes. "It improves the efficiency of communication." :

In addition to the companies mentioned in this article, information on other service providers is available via NBAA's online Products & Services Directory (www.nbaa.org/prodsvcs).

OPERATIONS



Navigator: Doing Something About the Weather

Weather is responsible for more than 60 percent of the delays in the National Airspace System (NAS). While this leaves a lot of room for improvement, this number has actually stayed the same for a fairly long period of time. The question becomes, "What can NBAA, as an organization, do to help bring this number down?" In part, the answer lies in participation in the Friends and Partners in Aviation Weather (FPAW) industry working group or the NBAA Access Committee's Weather Subcommittee.

Back in 1997, NBAA helped bring together people from the FAA, the National Weather Service (NWS), government weather contractors, academics and the aviation weather user community to form FPAW. This group now meets twice a year, with the National Transportation Safety Board (NTSB) hosting the summer FPAW meeting at its headquarters in Washington, DC, and NBAA hosting the fall meeting at its annual Business Aviation Convention & Exhibition.

These two annual meetings are preceded by a planning session each spring to determine the topics to be covered. FPAW is currently led by Bruce Carmichael of the National Center for Atmospheric Research (NCAR), who is a member of the NBAA Access Committee.

This year, the fall FPAW meeting will be held on Nov. 18 and 19 during NBAA2015 in Las Vegas, NV. NBAA's Air Traffic Services (ATS) team is particularly excited about the fall FPAW meeting this year because they have dedicated the afternoon of Nov. 18 to examining space weather impacts on aviation operations. Topics to be discussed include the radiation environment and its impact on HF radios and the Wide Area Augmentation System. NBAA encourages members to provide input to the panel discussion, either

NBAA ATS encourages Members to participate on the Weather Subcommittee to help ensure that the needs of thousands of business aircraft operators continue to be addressed. by attending the meeting in person or by submitting questions in advance to NBAA ATS at airtraffic@nbaa.org.

The fall FPAW meeting will continue on Nov. 19, with a joint briefing from the FAA and NWS on current weather operations. Next, an airport operations official will discuss how to predict runway friction, and an FAA representative will brief attendees about the Terminal Area Icing Weather Information for NextGen. The morning session will end with a discussion of the different types of aircraft-derived meteorological information.

In the afternoon, the focus on icing will continue, with a discussion of high ice-water content engine icing, followed by a look at two more topics of great interest to NBAA members – emerging aviation weather research and the impact of weather on the operation of unmanned aircraft systems.

NBAA ATS encourages all members attending NBAA2015 to share their expertise and experiences at this year's fall FPAW gathering.

NBAA WEATHER SUBCOMMITTEE HELP NEEDED

John Kosak, part of the NBAA ATS team based at the FAA Air Traffic Control System Command Center (ATCSCC), has ably represented the association on the FAA's Collaborative Decision-Making Weather Evaluation Team (WET) since 2008.

Over the past eight years, WET has been involved with improving some of the legacy convective-forecast products, such as the Collaborative Convective Forecast Product, which is now automated and offers two-, four-, six- and eight-hour panels instead of the previous four-, sixand eight-hour versions. The WET also spearheaded the implementation of the Aviation Winter Weather Dashboard, a great tool for monitoring potential winter weather impacts on the NAS.

NBAA established a Weather Subcommittee in 2014 to provide opportunities for business aircraft operators "Through your participation in the NBAA Access Committee's Weather Subcommittee, you can help ensure that the needs of thousands of business aircraft operators continue to be addressed."

to collaborate with the broader aviation weather community on finding solutions to the most important weather challenges facing the aviation community – specifically, what new weather tools the FAA and NWS can develop. The goal is to recruit a diverse group of NBAA members that represent all operational disciplines – from schedulers and dispatchers to pilots and cabin crewmembers – thereby providing the business aviation perspective to the greater weather community.

NBAA ATS encourages members to participate on the Weather Subcommittee to help ensure that the needs of thousands of business aircraft operators continue to be addressed. Members who are interested in joining the subcommittee should contact Chairman Bruce Carmichael at brucec@ ucar.edu or NBAA staff liaison John Kosak at jkosak@nbaa.org. :

Register for NBAA2015 and review the meeting agenda at www.nbaa.org/2015/insider. Learn more about NBAA's Weather Subcommittee at www. nbaa.org/weather-subcommittee.



Register by Oct. 23 for the early bird member price of \$1,265. www.nbaa.org/tax/insider

MEMBER CENTRAL



New Noise-Abatement Guidelines Released

NBAA's updated Noise Abatement Program (NAP) was presented at the association's Teterboro Regional Forum on June 25. The new guidelines were developed for today's business jet aircraft, which are quieter, climb faster and often operate at airports that are far more congested than when the NAP was first launched in 1967.

The revised guidelines, which are meant for use in the absence of recommended noise-abatement procedures from an aircraft's manufacturer, help reduce overall noise levels for communities around airports while also meeting modern operating requirements. The updated NAP includes recommendations for approach and landing procedures, along with a new option for high-density airports that may enable the procedure to be used where it was not feasible before. The former "close-in" departure procedure is not included in the new guidelines, as it was found to have no significant impact on noise reduction for today's quieter Stage 3 and 4 aircraft.

Learn more at www.nbaa.org/quietflying.



Member Benefits

PROTECT YOUR MEDICAL CERTIFICATE

NBAA is partnering with Virtual Flight Surgeons, Inc. to offer members an exclusive 10-percent discount on the Complete Aeromedical Services Program (CASP). CASP provides access to comprehensive tools and services to ensure your medical certificate is protected. The tools include confidential physician consultations, FAA waiver advocacy and case preparation, FAA follow-up reporting and renewal submission, business flight physiology and medical procedures and programs review, and more. Member companies can take advantage of this service for an annual, per-pilot fee. For more information, visit www.nbaa.org/medical.

DISCOUNTED MEMBER PRICING AT NBAA2015

NBAA members receive a \$200 discount on the cost of registration for each person who attends NBAA2015. Consistently ranked among the top 10 largest U.S. trade shows by Tradeshow Week, NBAA2015 offers education sessions, exhibits, a static display and valuable networking opportunities all in one place. The convention will provide a unique gathering place for members to unite and address the significant challenges facing the industry today. To receive the discount, use your member login at www.nbaa.org/2015/insider.

Upcoming Events

NBAA2015 TO FEATURE PROVEN FAVORITES AND NEW EVENTS

NBAA's Business Aviation Convention & Exhibition (NBAA2015) will kick off at the Las Vegas Convention Center on Tuesday, Nov. 17 and run through Thursday, Nov. 19. Many of attendees' favorite events will be back, including the static display of aircraft at Henderson Executive Airport, along with the return of initiatives successfully launched at NBAA2014. In addition, the show will be the site of the inaugural National Safety Forum (see separate article).

- Education Sessions This year's sessions will cover a range of topics, from operations and management basics to today's most pressing industry concerns. At least two sessions will be held on unmanned aircraft systems (UAS), including the use of small UAS in business aviation and "detect and avoid" UAS technology. Sessions covering the latest in technology will touch on broadband communications, worldwide equipage mandates, flight deck evolution and connectivity, weather technology in the cockpit, and RVSM and new monitoring technologies.
- NBAA Coffee Social Popular with longtime, new and prospective members, this event will take place on Tuesday from 2 to 3 p.m. at NBAA's booth (#N904) in the exhibit hall. Meet with NBAA's leadership, including President and CEO Ed Bolen, members of the board of directors, members of the Associate Member Advisory Council (AMAC) and NBAA committee members. Attendees

also can network with other industry professionals, learn more about NBAA member benefits, share ideas for new benefits and services, and give feedback to the association's staff. Those present will have the chance to win a free pass to NBAA2016 in Orlando.

- NBAA/CAN Soiree This event will be held on Wednesday, Nov. 18 at 6 p.m. in the Venetian Hotel. Participation in the live and silent auctions supports the work of the Corporate Angel Network (CAN), which arranges for the transport of cancer patients on business aircraft. Entertain customers, network with industry peers and be treated to a private concert and dinner, all while contributing to an important cause. Either complete tables or individual seats can be reserved during the registration process for NBAA2015.
- Yo Pro As they did for the first time at NBAA2014, the industry's young professionals will gather in the Innovation Zone for the NBAA2015 YoPro event, which offers young professionals the opportunity to network with each other and with more experienced industry professionals. Additionally, the Innovation Zone will host education sessions on cutting-edge topics.

View the agenda, get exhibitor information and register for NBAA2015 at

www.nbaa.org/2015/insider.

INAUGURAL NATIONAL SAFETY FORUM AT NBAA2015

The NBAA Safety Committee's Inaugural National Safety Forum will take place at NBAA's convention on Nov. 19 from



Events Calendar

September

Sept. 14 PDP Course: Regulatory Compliance and Documentation • Washington, DC

Sept. 15

PDP Course: Goal Achievement and Performance Reviews • Washington, DC

Sept. 17 NBAA Regional Forum • St. Louis, MO

November

Nov. 15-16

NBAA Tax, Regulatory & Risk Management Conference • Las Vegas, NV

Nov. 17–19 Business Aviation Convention & Exhibition (NBAA2015) • Las Vegas, NV

January

Jan. 19–22 Schedulers & Dispatchers Conference (SDC2016) • Tampa, FL

February

Feb. 10–12 Business Aircraft Finance, Registration & Legal Conference • Boca Raton, FL

Feb. 22–24 Leadership Conference • San Antonio, TX

March

March 21-24

International Operators Conference (IOC2016) • San Diego, CA

WWW.NBAA.ORG/EVENTS

MEMBER CENTRAL

9:30 a.m. to 3 p.m. at the Las Vegas Convention Center. The forum will feature opportunities for dialogue with top safety thought leaders and in-depth discussion of the Safety Committee's Top Safety Focus Areas for 2015. Session attendees will enhance their awareness of the significant risks facing business aviation over the next two to five years and will leave the forum with practical strategies for both addressing these issues within their operations and sharing the information with other operators. Learn more at www.nbaa.org/ national-safety-forum.

UNLOCK YOUR POTENTIAL: CONNECT AT SDC2016

An estimated 2,700 business aviation professionals are expected to gather

in Tampa, FL from Jan. 19 to 22 to network with peers, share best practices and get business accomplished. NBAA's Schedulers & Dispatchers Conference (SDC2016) is the premier event at which to interact with those directly responsible for the dispatching of business aircraft and procuring services for flight departments and on-demand charter operators worldwide. SDC2016 will feature education sessions for all flight operations personnel, an exhibit floor showcasing the latest products and services, the chance to meet faceto-face with vendors and suppliers, as well as the opportunity to network with fellow schedulers and share best practices. Register today at www.nbaa.org/ sdc/insider.

EXHIBITOR APPLICATIONS NOW BEING ACCEPTED FOR MMC2016

The 2016 NBAA Maintenance Management Conference (MMC2016) will be held May 3 to 5 in Kansas City, MO. This unique industry event addresses issues related to business aircraft maintenance needs and attracts flight department decision-makers, including directors of maintenance, maintenance technicians, aircraft owner/operators and chief pilots. These professionals return to MMC year after year for the professional development and networking the event provides, and to get business done. MMC2016 will feature a dedicated exhibit hall and indoor static display designed to showcase fuel trucks, tugs, safety equipment and mobile service centers. Exhibitor applications can be found at www.nbaa.org/mmc/insider.

Professional Development

NEW CAM JOB ANALYSIS PROVIDES INSIGHT

In July, the NBAA Certified Aviation Manager (CAM) program launched its second job analysis survey. Managed by outside research firm Schroeder Measurement Technologies, Inc., the survey helps NBAA and the CAM Governing Board clearly understand the evolving role of a CAM. The job analysis is critical to ensuring that the CAM program stays relevant and up to date, and that the CAM exam covers the skills and issues that are essential to the industry. For example, results from the 2003 job analysis led the CAM Governing Board to add safety management systems and other new concepts to the exam.

More than 8,000 people, including current CAMs and other individuals identified as aviation managers, were invited to participate. The survey closed on Aug. 14, and the results will be released soon. Learn more about the CAM program at www.nbaa.org/cam.

ATTEND PDP COURSES AND EARN CAM CREDIT AT NBAA2015

Several workshops and other NBAA Professional Development Program (PDP) courses will be offered before and after NBAA2015 in Las Vegas, NV. The registration fee for all of these courses includes admission to NBAA2015.

Nov. 15

- Teams in Business and General Aviation, Performance-Enhancing Tools
- Emergency Response Planning Workshop (day 1)
- Flight Operations Manual Workshop (day 1)

Nov. 16

- Introduction to Business Aviation
- Technical Operations Manual Workshop
- Emergency Response Planning Workshop (day 2)
- Flight Operations Manual Workshop (day 2)

Nov. 20–21

 Management Fundamentals for Flight Departments Workshop (two-day course)

All PDP courses are eligible for CAM application and recertification credit. During the convention itself, there will be at least 25 opportunities to earn CAM credit at various education sessions. To see the full list of CAM-approved education sessions, view the NBAA2015 agenda at www.nbaa.org/2015/insider.

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